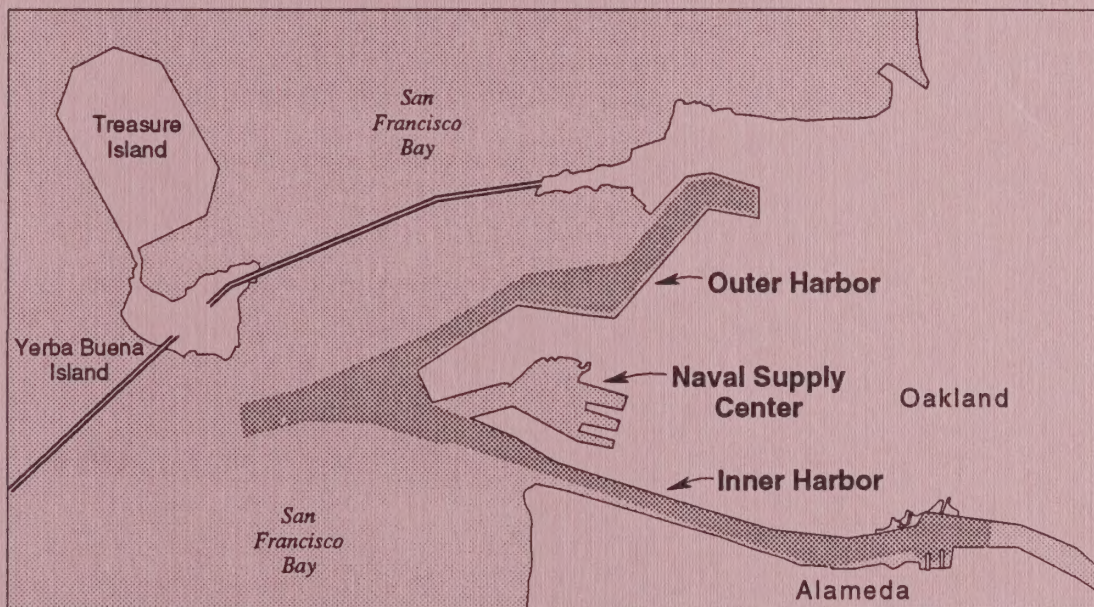


Final Supplemental Environmental Impact Report/ Environmental Impact Statement Oakland Harbor Deep-Draft Navigation Improvements

SCH 91073031

Appendix M Comments on the Draft SEIR/S

Appendix N Responses to Comments on the Draft SEIR/S



Prepared by

**U.S. Army Corps of Engineers
San Francisco District**

Port of Oakland

Federal Lead Agency

State Lead Agency

June 1994

**Final Supplemental
Environmental Impact Report/
Environmental Impact Statement
Oakland Harbor Deep-Draft
Navigation Improvements**

SCH 91073031

**Appendix M
Comments on the Draft SEIR/S**

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Prepared by

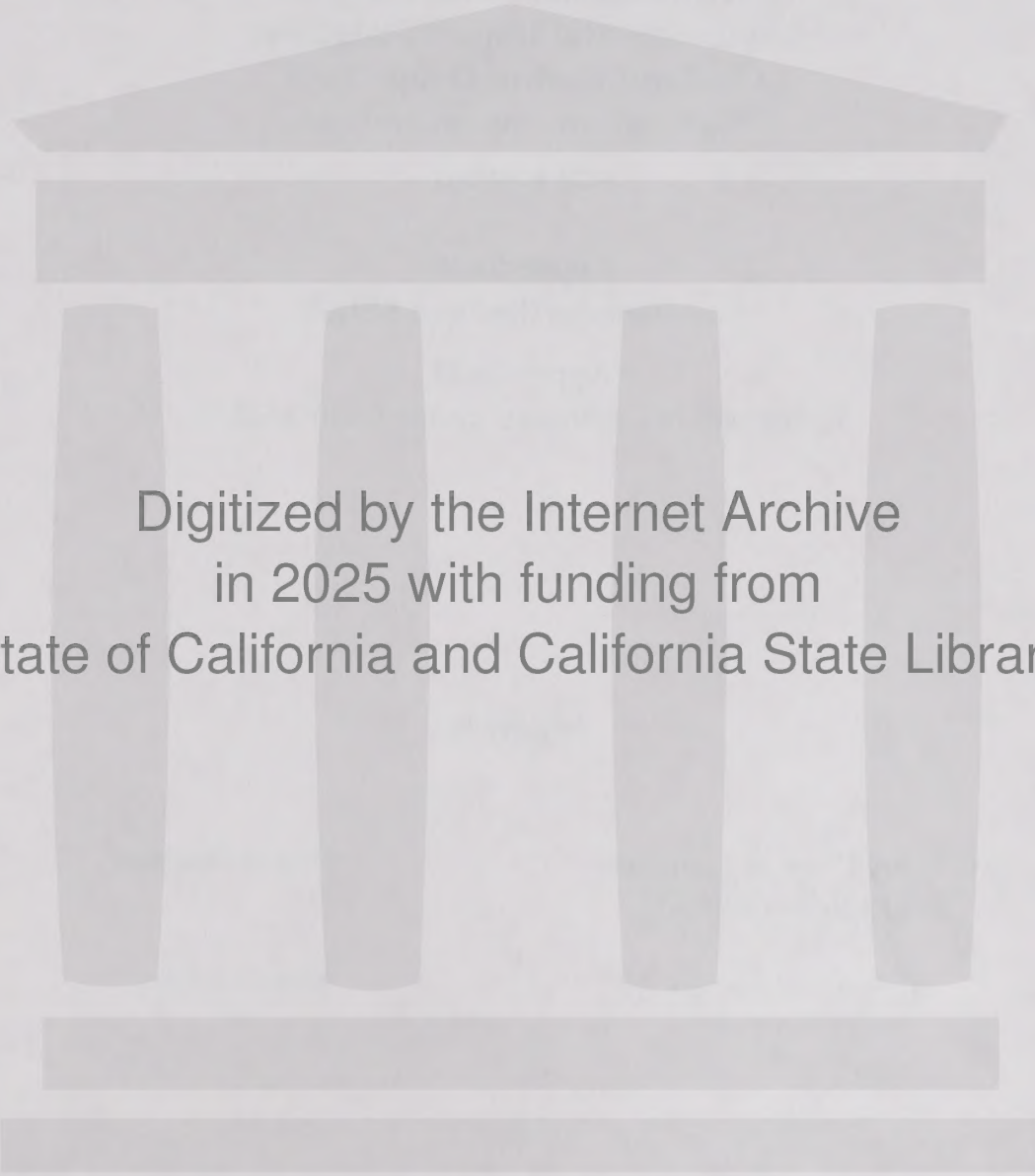
**U.S. Army Corps of Engineers
San Francisco District**

Federal Lead Agency

Port of Oakland

State Lead Agency

June 1994



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Introduction

Appendix M includes copies of the comments submitted on the Draft SEIR/S. It includes oral comments made during the public hearing on April 14, 1994, and comment letters from numerous agencies, organizations, and individuals. It also includes a copy of a petition.

Appendix N includes responses to all the comments contained in Appendix M. The responses in Appendix N are organized in the same order in which the comment letters are presented in Appendix M.

The following summarizes the comment activity on the Draft SEIR/S. Twenty (20) members of the public spoke at the public hearing on the Draft SEIR/S held at 7:30 P.M. on April 14, 1994, at the Federal Building in Oakland, California. Written comments on the Draft SEIR/S include 65 letters from agencies, organizations, and individuals; 264 form letters; and 100 petitions signed by a total of approximately 2,000 people. Both the form letters and the petitions note the proposed temporary closure of Galbraith Golf Course and the resulting loss of golfing opportunities. The 65 letters received came from federal agencies (4 letters), state agencies (6 letters), regional and local agencies (9 letters), other (non-golf) organizations (16 letters), golf organizations (11 letters), and individuals (19 letters). Comments during the public hearing, and the letters, form letters, and petitions resulted in a combined total of 540 comments; a number of these comments were essentially the same.

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and Comments made during the April 14, 1994 Public Hearing on the Draft SEIR/S
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Comments from Federal Agencies

APPENDIX M

Comments on the Draft SEIR/S

Comments from State Agencies

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Commission, letter dated May 2, 1994

VINCENT PAUL, California Department of Water Resources, letter dated
May 3, 1994

JOHN L. TURNER, California Department of Fish and Game, letter dated
April 13, 1994

MICHAEL CHENETTY JR., Governor's Office of Strategic Planning,
letter dated April 27, 1994

MARY BRIDGE, San Jose Community Development, letter dated April 27, 1994

WALT PERITT, San Jose Economic Development, letter dated April 27, 1994
including a memorandum dated September 1, 1994

Comments from Regional and Local Agencies

CLAUDE MEDNER, Contra Costa County, letter dated April 13, 1994

CLYDE WILLIAMS, Contra Costa County, letter dated April 13, 1994

CLYDE WILLIAMS, Contra Costa County, letter dated April 13, 1994

ALVIN D. TAYLOR, Contra Costa County, letter dated April 13, 1994

ELMER HENNINGSEN, City of San Jose, letter dated April 13, 1994

EDWARD L. HARRIS, Santa Clara County, letter dated April 13, 1994

DAVID E. BROWN, Santa Clara County, letter dated April 13, 1994

JOHN E. LARSEN, Santa Clara County, letter dated April 13, 1994

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U.S. ARMY CORPS OF ENGINEERS

SAN FRANCISCO DISTRICT

PUBLIC MEETING

OAKLAND HARBOR DEEP-DRAFT

NAVIGATION IMPROVEMENTS

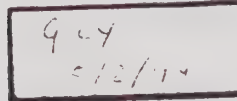
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REPORTER'S TRANSCRIPT OF PROCEEDINGS

Thursday, April 14, 1994

Oakland Federal Building
Room 412 Auditorium 3rd Floor
1301 Clay Street

CERTIFIED
COPY



Reported by:

HEIDI RYDER SIMPSON, CSR 10053



ABA REPORTERS

A Division of

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350 Sansome Street, Suite 10

San Francisco, California 94104

415-391-2999



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OFFICIALS IN ATTENDANCE

(Seated Along the Front of the Audience.)

Mr. Charles Foster, Deputy Executive
Director, Port of Oakland;

Ms. Laurel Marcus, Project Director,
California State Coastal Conservancy;

Ms. Jody Zaitlin, Environmental Planner,
Port of Oakland;

Mr. James McGrath, Environmental Manager,
Port of Oakland;

Mr. Roger Golden, Environmental Resources
Planner, Corps of Engineers;

Mr. Roderick Chisholm, Chief,
Environmental Branch, Corps of Engineers;

--oOo--

PUBLIC IN ATTENDANCE

R.L. Toney, Oakland Chamber of Commerce,
475 14th Street, Oakland, California 94612;

Elmer Penaranda, Assistant Planner, City
of San Leandro, 835 E. 14th Street, San Leandro,
California 94577;

Jacquee Castain, President, Webster Tract
Neighbors, 1633 84th Avenue, Oakland, California
94621;

1 Owen Marron, Executive Secretary, Alameda
2 County Central Labor Council, 7992 Capwell Drive,
3 Oakland, California;

4 Daniel S. Beagle, Bay Dredging Action
5 Coalition, World Trade Center, No. 321, San
6 Francisco, California 94111;

7 Felix Gonzalez, 499 Warden Avenue,
8 San Leandro, California 94577;

9 David Tam, East Bay League of Conservation
10 Voters, P.O. Box 711, Berkeley, California 94901;

11 Burt Peterson, 805 Pacific Avenue,
12 Alameda, California 94501;

13 James J. Birch, New United Motor
14 Manufacturing, Inc., 45500 Fremont Boulevard,
15 Fremont, California 94538;

16 Yvonne Willis Ash, Sierra Club, 8601
17 MacArthur Boulevard, Oakland, California 94605;

18 Hugh "Galbraith" McKay, Galbraith Golf
19 Links, 10505 Doolittle Drive, Oakland, California
20 94603;

21 Paul H. King, Ransom/McKay, 4020 Panama
22 Court, Oakland, California 94611;

23 A.L. Ferreira, 2130 102nd Avenue, Oakland,
24 California 94603;

25 Steve Goldbeck, SFBCDC, 30 Van Ness

1 Avenue, San Francisco, California 94131;

2 Mayola L. Lewis, Junior Guild, 571
3 Fitzpatrick Road, Oakland, California 94603;

4 Dan Regan, Alameda County Economic
5 Developmental Advisory Board, 1221 Oak Street,
6 Oakland, California 94612;

7 Aart DeVos, Ransom/McKay Golf, Inc., 10505
8 Doolittle Drive, Oakland, California;

9 John Shively, 1604 Sonoma Avenue, Albany,
10 California 94707;

11 Grayson Graves, 2115 Whelan Avenue,
12 San Leandro, California 94577;

13 Joy L. Hawkins, Accounting Manager,
14 Galbraith Golf Course, 10505 Doolittle Drive,
15 Oakland, California 94603;

16 Emily Copada, 1025 Columbus Avenue,
17 San Francisco, California 94133;

18 Gladys Green, 1187 78th Avenue, Oakland,
19 California 94621;

20 John Glover, Port of Oakland (no address
21 given);

22 David G. Sox, Commander (SU), Maintenance
23 & Logistics Command Pacific, Bldg. 54-D, Coast Guard
24 Island, Alameda, California 94501-5100;

25 Michael James, 8117 Sunkist Drive,

1 Oakland, California 94605;

2 Lincoln Smith, 7992 Capwell Drive,
3 Oakland, California;

4 Tamara Williams, Vice President, HLA (no
5 address given);

6 Lisa Teague, HLA, 101 Digital Drive,
7 Novato, California 94947;

8 Neil Werner, Environmental Supervisor,
9 Port of Oakland, 530 Water Street, Oakland,
10 California 94607;

11 Donnell Choy, 505 14th Street, 12th Floor,
12 Oakland, California 94612;

13 Leonard Zacher, Golfer-Men's Club, 243
14 Wayne Avenue, Oakland, California;

15 Pamela G. Clark, Action Director, League
16 of Women Voters of Oakland, 8059 Coach Drive,
17 Oakland, California 94605;

18 Angela Burgess, Ransom/McKay Golf, 10505
19 Doolittle Drive, Oakland, California 94603;

20 Robert Hammer, 8 Eclipse Court, Alameda,
21 California 94501;

22 Beverly Hammer, 8 Eclipse Court, Alameda,
23 California 94501;

24 R. Rowe, Galbraith Golf Course, 1517
25 Versailles Avenue, Alameda, California;

1 Jack Heightchen, 5090 Hutton Street,
2 Fremont, California 94538;

3 Bill Armstrong, 28227 Murcia Street,
4 Hayward, California 94545;

5 Ralph Gin, Port of Oakland, 530 Water
6 Street, Oakland, California 94612;

7 H. Gay Joseph, Port of Oakland, 530 Water
8 Street, Oakland, California 94607;

9 Robert F. Rauktis, Coastal Advocates
10 Surfrider - Santa Cruz, 654 Cabrillo Avenue,
11 Stanford, California 94305;

12 Eddie Mae Jones, Elmhurst District Board,
13 184 Kimberlin Heights, Oakland, California 94619;

14 Emiliano Acosta, a concerned citizen (no
15 address given);

16 Craig Williams, 5218 Bond, Oakland,
17 California 94618;

18 Manuel Ferreira, 907 54th Avenue, Oakland,
19 California 94601;

20 Doug Lipton, Senior Associate,
21 Levine-Fricke, 1900 Powell Street, Emeryville,
22 California 94608;

23 Jeanette Dong, Port of Oakland, 530 Water
24 Street, Oakland, California 94607;

25 Barbara Oliver, Galbraith Women's Club,

1 615 Tudor Road, San Leandro, California 94577;

2 Baird Oliver, 615 Tudor Road, San Leandro,
3 California 94577;

4 Steve Lawless, P.O. Box 233, Woodacre,
5 California 94973; and

6 Anthony Richard Dirito, 1604 Sherman
7 Street, Alameda, California 94501.

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REPORTER'S TRANSCRIPT

7:36 p.m.

Thursday

April 14, 1994

--oOo--

COL. CARDOZA: Good evening.

Can I ask you to take your seats.

Can you all hear me like this, so I don't have to be speaking into the microphone? I'm more comfortable with it. Great. Thank you very much. I would like to welcome you to the meeting tonight.

I'm Lieutenant-Colonel Leonard Cardoza, the District Engineer of San Francisco District Corps of Engineers. And we're all assembled here tonight to discuss the relocation -- put the previous slide up -- the relocation of the Golden Gate Bridge, right?

Actually, I would like to welcome you to the public meeting on the Oakland Harbor Deep-Draft Navigation Improvements, the Draft Supplemental Impact Report and Statement.

Could I have the agenda slide? Very simple agenda. We're going to talk about the purpose of the meeting tonight. I will give a very brief project description. Most of you have heard about the project before.

1 We are going to go into the most
2 important part of the meeting, that is, the public
3 comment period and any administrative remarks as
4 appropriate.

5 Next, the purpose: The purpose of
6 tonight's meeting is to allow the public to provide
7 either oral comments, written comments, or both, on
8 the Draft Supplementary Environmental Impact Report
9 and Statement.

10 This draft document has been prepared by
11 the Port of Oakland and the Army Corps of Engineers
12 to evaluate the impact associated with the proposed
13 Oakland Harbor Navigation Improvements.

14 The project consists of deepening the
15 inner and outer harbors to a depth of minus 42 feet
16 to accommodate deep draft ships and of disposing an
17 estimated 5.8 million cubic yards of dredged
18 materials.

19 INTRODUCTIONS

20 At this time, I would like to introduce
21 the front row. And I will start with Mr. Chuck
22 Foster, who is the Deputy Executive Director for the
23 Port of Oakland. Right next to him is Mr. Jim
24 McGrath, who is the Environmental Manager for the
25 Port of Oakland. And then next to Jim is Roger

1 Golden, who is the Environmental Resources Manager
2 for San Francisco District Corps of Engineers. And
3 Jody Zaitlin, who is an Environmental Planner for
4 the Port of Oakland. And, finally, we have
5 Ms. Deborah Pontifex, who is representing our
6 contractor for this fine document, SAIC. I hope I
7 have got everybody in the right order.

8 Okay. If I can have the next slide?

9 The Water Resources Development Act, or
10 WRDA, of 1986, authorized the construction of
11 navigation improvements to Oakland Harbor. Also,
12 The Water Resources Development Act of 1992 directed
13 the Secretary of the Army to implement a wetland
14 demonstration project at the Sonoma Baylands site.

15 The Sonoma Baylands site is one of the
16 proposed dredged material placement sites associated
17 with the Oakland Project. The Port of Oakland is
18 the nonfederal or local sponsor for the harbor
19 improvement.

20 The California State Coastal Conservatory
21 is a nonfederal or local sponsor for the Sonoma
22 Baylands Project.

23 Next slide, please.

24 Of course, this is a graphic version of
25 the slide you just saw. The Oakland Harbor consists

1 of two channels: an outer harbor and an inner
2 harbor. Approximately 3.4 miles of the outer harbor
3 and four miles of inner harbor would be deepened to
4 minus 42 feet below low tide.

5 Other improvements would be construction
6 of a new training basin in the inner harbor, right
7 about here; deepening of vessel berthing area,
8 depicted by black here on the slide; relocation of
9 any impacted utilities; and, finally, the removal of
10 any existing pier structures that might be impacting
11 on the project. And here you see two piers that go
12 into the turning base and circle.

13 Next slide.

14 As everyone here knows, the disposal of
15 dredged material has been, and continues to be, very
16 controversial in the Bay Area if, indeed, not the
17 world. I'd like to say that if I can figure out a
18 way for dredged material to go into an alternate
19 universe, somebody would object to that.

20 Twenty-three dredged material disposal
21 sites were initially considered for this project.
22 These were subsequently reduced to eight sites and
23 include aquatic sites, both ocean and in-bay, as
24 well as numerous upland disposal sites. These are
25 all analyzed in detail, as depicted in the document.

1 Since none of the eight disposal sites
2 can accept the full project volume of dredged
3 material due to either site capacity limitations or
4 site restrictions because of sediment quality, these
5 sites are grouped together in different combinations
6 to develop the 12 project alternatives.

7 The selected plan and environmentally
8 preferred alternative is categorized as maximum
9 wetland restoration and includes the following
10 disposal sites: 50 miles out, straight out,
11 nautical miles, straight outside the Golden Gate at
12 the proposed Naval site; the Sonoma Baylands site in
13 upper San Pablo Bay, right here; the Galbraith Golf
14 Course; and, if required, 9th Avenue terminal as a
15 rehandling facility.

16 Next slide, please.

17 This slide represents the sediment
18 quantities associated with the three sites that I
19 just -- the three major sites that I just showed on
20 the previous slide. 1.8 million cubic yards will go
21 to the Pacific Ocean at the proposed EPA-designated
22 sites. 2.6 million cubic yards will go on to the
23 proposed Sonoma Baylands Wetlands Restoration
24 project. 1.4 million cubic yards would be placed at
25 the Galbraith Golf Course.

1 This next slide represents the project
2 schedule, but I am only going to cover two dates,
3 these two critically important dates. The comment
4 period ends on the 2nd of May, and we are absolutely
5 committed to a construction start on the 19th of
6 December.

7 Now I would like to transition into the
8 most important part of this meeting, specifically,
9 the acceptance of public comments. And I would like
10 to go over a few measures to allow this part of the
11 meeting to go smoothly. I hope you have had a
12 chance to fill out one of these little white cards.
13 They're very important for two reasons.

14 First of all, it lets us know if you
15 would like to speak or present comments at the
16 meeting. Secondly, it gives us an accurate record
17 of your name, address and issues so we can keep you
18 informed of future developments of this project.

19 If you have not filled out one of these
20 cards and wish to speak, wish to be placed on the
21 mailing list, please raise your hand. We'll get the
22 cards to you right now.

23 Nobody snuck in by the back door.
24 Excellent.

25 We are also recording this meeting. And

1 again, it is to ensure that we have an accurate
2 record of the proceedings and your comments.

3 I am going to be calling two names at a
4 time. The immediate speaker, and then the follow-on
5 speaker. This allows to you prepare yourself, get
6 ready, and then go on up to the microphone.

7 When you come up to the microphone,
8 please, clearly state your name, your address,
9 organization you represent, if appropriate. And I
10 am going to ask you to limit your comments to about
11 five minutes. As you can see, I only have one
12 minute left in my comments.

13 If you intend to present written
14 comments, please summarize them. And also, another
15 measure, if you have already heard your comments
16 presented by another speaker, state so, and I will
17 carefully note that for the record: that you had
18 the comments, they were presented before. This will
19 allow everyone who wants to speak to speak tonight,
20 so we receive all of your comments.

21 My time is up. So I would like to go
22 immediately into the comment period. Thank you very
23 much.

24 I would like to start -- the first two
25 names on the list would be Admiral Toney, who

1 represents the Oakland Chamber of Commerce; and he
2 will be followed by Elmer -- this is a hard one --
3 Penaranda?

4 MR. PENARANDA: Yes.

5 PUBLIC SPEAKING SESSION

6 COL. CARDOZA: Sir?

7 MR. TONEY: Good evening, Col. Cardoza,
8 Mr. Foster and members of the panel, ladies and
9 gentlemen.

10 For the record, my name is Robert Toney,
11 United States Navy, retired; President and Chief
12 Executive Officer of the Oakland Chamber of
13 Commerce.

14 The Corps of Engineers Environmental
15 Impact and Human Health Risk Assessment has found
16 that this dredging project, which we are here
17 tonight to address, will pose insignificant risk to
18 our health and to our environment.

19 In view of the results of these very
20 comprehensive studies, the Board of Directors of the
21 over 1700 members of the Oakland Chamber of Commerce
22 recommend that the dredging of the Oakland -- of the
23 shipping channel of Oakland, the 42 feet, and the
24 disposal of the dredge sediment at the three sites,
25 the ocean site, the Sonoma Baylands site and the

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1 Galbraith site, be authorized to commence as early
2 as possible.

3 The Port of Oakland and the Corps of
4 Engineers have a job development responsibility, as
5 well as a responsibility to protect our environment.
6 Several million dollars have been spent to date, and
7 approximately 22 years of time have elapsed in this
8 effort to dredge our harbor.

9 I think that you will agree that due
10 diligence is being exercised in this particular
11 project. But I am here tonight to talk about jobs;
12 the jobs of the people of Oakland and the
13 surrounding region; the jobs that this project will
14 bring to life; jobs that will bring to life the
15 retail and economic base of our city; the jobs that
16 will take Oakland to the next rung of the economic
17 ladder. It is that same ladder upon which we have
18 been scratching and clawing for so many years. And,
19 ladies and gentlemen, I believe the top is now in
20 sight.

21 This evening I will let somebody else
22 talk about how the Port of Oakland has the
23 shallowest channel of any major port on the West
24 Coast and about how we've trying to dredge our
25 shipping channels since 1972; and how we have lost

1 business activity in Oakland because shipping lines
2 have taken much of their discretionary cargo to
3 deeper ports.

4 This evening, I want to concentrate on
5 jobs, like the 7,000 jobs at the Port of Oakland
6 that support the maritime activities there. About
7 19 percent or about 1,300 of those employees are
8 Oakland residents. But the forecasted gains, as a
9 result of the dredging, indicates a very dramatic
10 increase. And it's those jobs that are essential to
11 this city. They're very essential for this city to
12 prosper.

13 Ladies and gentlemen, Oakland and its
14 citizens have waited long enough. It is time to
15 remove the shackles from our residents in East
16 Oakland. It's time to put everyone back to work and
17 to have a safe, prominent, and prosperous community.
18 It's time to tell the world that the Port of Oakland
19 is the number one, indeed, the number one port on
20 the West Coast.

21 I find it easy to sit back and dream of a
22 time when the dredging of the port, which we have
23 argued about for more than 20 years, will finally be
24 completed. It will be a time when Oakland and Bay
25 Area residents will be working and warehousing and

1 container repair and storage and trucking and marine
2 construction; that is, longshoremen workers and
3 terminal employees.

4 A wild and an enthusiastic, unrealistic
5 dream? Certainly not. This vision will come true
6 when all the doubts have been erased, when all the
7 critics have understood our concerns, when the
8 dredging, a thorn in the side of Oakland for so many
9 years, has been completed.

10 Ladies and gentlemen, on that day, the
11 people of Oakland will smile and celebrate. Our
12 dream will have come true. I want to emphasize,
13 again, that the businessmen and women, in large part
14 that are represented in the Chamber of Commerce of
15 Oakland, recommend very strongly that the dredging
16 for our estuary begin at the earliest possible time.

17 Thank you very much.

18 COL. CARDOZA: Thank you very much,
19 Admiral Toney.

20 Mr. Penaranda, who's the Assistant
21 Planner, City of San Leandro; and he will be
22 followed by Jacquee Castain.

23 MR. PENARANDA: Good evening, Colonel,
24 Mr. Foster, and panel.

25 I just wanted to state that we did

1 receive -- the City of San Leandro did receive the
2 draft EIR. We will be reviewing it and submitting
3 comments prior to the close of the May 2nd -- this
4 May 2nd comment period.

5 The concerns that the City will have and 4
6 will address in comments will be related to the
7 visual and potential odor impacts that the dredge
8 material may have on the industrial area. It is the
9 City's concern that there be no degradation of the
10 immediate industrial -- quality of the immediate
11 industrial area on Doolittle.

12 Thank you.

13 COL. CARDOZA: Thank you very much.

14 Ms. Jacquee Castain, who will be followed
15 by Owen Marron.

16 MS. CASTAIN: Good evening. Tonight I am
17 representing not only my neighborhood association,
18 but I also direct a nonprofit vocational training
19 school that has a program of school-to-work
20 transition program at Castlemont High School. In
21 addition to that, I'm the chairperson of the
22 Northern Alameda County Group of the Sierra Club.

23 There are a number of issues that I
24 really want to raise tonight because our group has
25 been studying, for almost a year, this dredging

1 project. And we have attended almost every meeting
2 of the Port of Oakland at the Commission level, the
3 City Council and, of course, our group has held two
4 meetings, one in January and one in March,
5 addressing this issue.

5
6 The primary issue, I guess, is the one
7 we've heard about the jobs. And I know the Army
8 Corps stated there would be something like 4,000
9 jobs. And, of course, being an Oakland resident and
10 knowing that East Oakland has about 50 percent youth
11 unemployment rate, we truly need to address this.
12 We have asked: "Where are the jobs? Who is going
13 to do the hiring?"

14 At our last meeting on March 31st, there
15 was a statement made about who had the legal
16 responsibility for doing the hiring, especially for
17 the homeless, the street people. I would like to
18 know: Who is going to address that? Because
19 certainly, I have seen no plans on the part of the
20 Port or the Engineers or anybody else to address
21 that.

22 And I am saying to you, as a nonprofit
23 agency, I'd like to see it. I'd like to see
24 something specific about the plan to do that,
25 knowing how hard it is, and who is going to pay for

1 it. You're going to hire these people? Where are
2 the jobs? Who is it going to be? Who's going to
3 train them?

4 These questions seriously need to be
5 answered because I know it doesn't exist now. Where
6 is your plan? I'd like to see it. Where are the
7 jobs? Identify the employers. We need to see that.

8 Currently, we have been working with the
9 Galbraith Golf Course for over a year. We have
10 eight students that have been working there. And
11 they are learning to operate that business. And I'm
12 saying they're learning it because there are
13 scholarships there. And because we train at-risk
14 and high-risk students, students that normally know
15 nothing about going to work, to make sure that they
16 don't drop out of school. And I'm saying there has
17 to be that kind of commitment in this city.

18 We also live in that neighborhood. I own
19 a home there. I am five minutes from the airport.
20 And I'm saying we were very supportive when they
21 first talked about expanding the airport. We knew
22 that there was going to be some additional
23 congestion. We knew that the City of Alameda had
24 opposed it. We attended the meetings at the Oakland
25 Airport at the time they had the hearings, and we

1 were definitely in favor of it. However, there is
2 only so much that you can do in a low-income -- low-
3 to moderate-income neighborhood as far as impacting
4 it.

7 5 We have a number of problems now. There
6 are lot of toxics in the area. The City of Oakland
7 is talking about the Coliseum redevelopment area.
8 We know that there is going to have to be a lot of
9 removal of toxins in all of the existing areas. We
10 want to see that happen. We don't want to see
11 anything that is going to create additional hazards
12 for us.

13 Where the field is on Harvey, we have
14 Francesco's Restaurant. We're going to be waiting
15 for that soil that was supposed to be hydroseeded.
16 We haven't one blade of even green weed. There is
17 nothing there. That soil is just gray, almost
18 white.

8 19 And we understand that it is going to be
20 used on the Galbraith Golf Course. Isn't that going
21 to add some salinity to that soil? How is it going
22 to affect the wetlands and the water? Here you can
23 almost talk about being in conflict to what East Bay
24 Regional Parks is doing.

25 Here they are trying to create Oyster

1 Bay. They created the Martin Luther King Park,
2 which they are trying to restore. We have 9
3 specifically asked the Port, more than once, "Why
4 don't you do something in an economic development
5 mode that will make the area along the water and the
6 Bay more attractive, where we could have pedestrian
7 traffic, where people can walk?" There can be
8 trails. People can sit down, and they can shop at
9 small businesses.

10 Somehow, I think there are no visionaries
11 there because there is nothing of an economic plan
12 that addresses that. We want the City of Oakland to
13 reverse its negative image. You can't do that when
14 you come into a city and your airport, your port of
15 entry, all you get is this smell of stench.

16 I am saying we live in the neighborhood
17 there. We're trying to turn that around. We want
18 it to be healthy and safe for us. We want it to be
19 attractive. We want that type of sensitivity. We
20 did not ask the Port to be a health department. We
21 ask them to be sensitive. Thank you.

22 COL. CARDOZA: Thank you very much,
23 Jacquee.

24 And could I ask Mr. Owen Marron to speak,
25 and he will be followed by Dan Beagle.

1 MR. MARRON: Good evening. My name is
2 Owen Marron. I am Secretary/Treasurer of the
3 Central Labor Council of Alameda County, which
4 represents 70,000 union members who live and reside
5 and work in Alameda County. I am also a
6 vice-president of the two-million-member California
7 Labor Federation.

10 | 8 We support the Corps of Engineers and the
9 Port of Oakland in their dredging project.

10 Some 20 years ago, the Port of the
11 Oakland was a premiere port on the West Coast. I'm
12 just going to cite a couple of statistics because
13 everybody knows them by heart. We all know that the
14 Port of Oakland is -- maritime commerce is what
15 generates the economic activity in the Bay. It has
16 been estimated responsible for 100,000 jobs, about
17 \$5 billion worth of commerce a year.

18 And that's what we need is good-paying
19 jobs. What we recognized in the labor movement a
20 long time ago -- we were the first environmentalists
21 because our people are the people who live in these
22 areas. They can't live. The environmental movement
23 grew out of the health-and-safety movement because
24 our people work in factories that were unsafe, dirty
25 and dangerous because they were exploited by the

1 management.

11

2 So we recognized that if the Port was
3 going to be dredged, it had to be doing it in an
4 environmentally sound fashion. So this labor
5 council and the other labor councils that represent
6 750,000 trade unions in the Bay Area adopted a
7 Resolution. And I won't read you the whole
8 Resolution, but it says, "...where it may say
9 locations exist where dredged materials can be
10 dumped," and we want it to be done in an
11 environmentally sound fashion.

12 We have worked very closely with the
13 Sierra Club. In fact, I'm going back to Washington
14 with the Sierra Club representative to work out a
15 program of placing some of the dredged material in
16 the ocean, some to restore wetlands and placed --
17 place other materials in other places so it can be
18 moved, temporarily.

19 We all know how important dredging is. A
20 lot of people don't understand the complications of
21 it. And I always show this, one of the reasons is
22 the issue has always been twofold: one, the science
23 of disposal of dredge material; but, also, the
24 politics, the science and the mechanics of it.

25 And I would like the audience to look at

27

1 this. This is the diagram of what it takes to get
2 dredging done in San Francisco Bay. It would make a
3 diagram for an atomic bomb or a rocket look simple.
4 That's been one of the delays. The other is the
5 political issue about where you dispose of the
6 dredge material.

7 Now, I come from a steel town. And I
8 grew up and I worked at a steel mill. And steel
9 mills are not great places to be around. But I
10 assure you that the 250,000 workers who lost their
11 jobs in Mohanany Valley because of the destruction
12 of fuel, probably would wish occasionally that they
13 could get the smell of the steel mills because that
14 meant good-paying jobs.

15 We have worked very carefully on the
16 environmental issue. For example, this labor
17 council supported the only major organization,
18 except for one or two, that supported Oakland being
19 a nuclear-free zone. Our people live in this area.
20 We want to have an area that is environmentally
21 clean and protected because our people are not rich.
22 They don't live up in the hills. They can't afford
23 trips to Europe. They're here. They want to take
24 their kids fishing on the Bay. So we want to make
25 sure that this dredging is done in an

1 environmentally sound fashion.

2 We've had our arguments with the Port,
3 we've had our arguments with the Corps of Engineers.
4 But we say, let's get on with this dredging because¹²
5 it will be good for the community.

6 Jacquée Castain asked for the proof of
7 the jobs. The proof of the jobs is where they will
8 come from. It's not in the Port of Oakland. They
9 will provide jobs -- for example, the Longshoremen's
10 Union -- and there is an organization no better than
11 the Longshoremen's for bringing women and minorities
12 on board. The labor movement was in Alameda County.
13 They set an exemplary record of working with women
14 and minority organizations. And I will assure you
15 that we will do all in our power to ensure that the
16 jobs are provided for our people.

17 Thank you. Goodbye.

18 COL. CARDOZA: Thank you very much, John.

19 Mr. Dan Beagle, and he will be followed
20 by Felix Gonzalez.

21 MR. BEAGLE: Good evening. My name is
22 Daniel Beagle, and I represent the Bay Dredging
23 Action Coalition. The Bay Dredging Action Coalition
24 is approximately 500 businesses, ports, shipping
25 agencies, shipping companies and labor organizations

1 throughout the Bay Area.

2 We represent, in terms of labor, for
3 example, we represent every single labor council,
4 including Owen's Central Labor Council, the Contra
5 Costa, San Francisco and so on, the State Federation
6 belongs to the union, the Coalition Teamsters, and
7 so on. In terms of the business, again, the spread
8 is extremely large. It covers most of the shipping
9 companies, most of the stevedore companies, and just
10 about anybody who depends on deep-water access in
11 the Port of Oakland.

12 Given all that, our position on dredging,
13 which I will not detail because other people are
14 doing much better than I will, is obviously
13 | 15 predictable. We support the Port of Oakland's
16 project. And we think this kind of -- well, I don't
17 know if hen game is the right word, but this part of
18 the process is a great moment for our region, the
19 City of Oakland, and the entire area.

20 What is not predictable is the process by
21 which we have come to this point. When we touch on
22 it -- and I will touch on it real briefly -- what I
23 would just like to point out to the group tonight is
24 the exemplary cooperation that has gone on between
25 the public and the private sector, between our

1 congressional delegation, and many of the agencies
2 that have some piece of the dredging action -- and
3 that's about 15 -- have worked quite well together
4 in what is usually an area of dreadful bureaucratic
5 torpor. It continues to go on, as it will. There's
6 something about human nature that makes that happen.

7 But on the other hand, we have done
8 rather well in getting a document and getting a
9 process that all of these diverse interests, who do
10 not normally sit at the same table, or at least on
11 the same side of the same table, agree with.

12 We have had exemplary cooperation between 14
13 business and labor. We have had unbelievable
14 cooperation between the business/labor piece of the
15 pie and the environmental groups. And we've worked
16 very closely together on the water-quality issues.
17 We've worked very closely together to create the
18 Sonoma Baylands; to find sites for the dredging
19 material that are not in the Bay and that do not
20 disturb the environmental quality of our region.

21 With that, I will say thank you very
22 much. I think the process has been exemplary. And
23 I would like to congratulate the Corps for taking
24 this as far and as fast as you have. Thank you.

25 COL. CARDOZA: Thanks a lot, Danny.

1 Felix Gonzalez. And he will be followed
2 by -- here's a tough one -- Daslo Tam. I apologize
3 if I messed this one up. David Tam?

4 MR. GONZALEZ: Good evening, ladies and
5 gentlemen. My name is Felix Gonzalez, and I am a
15 6 resident of San Leandro, California. And I am here
7 because I am angry about the lack of consideration
8 or discussion by the Port of Oakland for trying to
9 fill the Galbraith Golf Course with toxic material
10 that will contain an offensive odor without regard
11 for the residents of San Leandro. The odor will
12 also impose a hardship on the quality of life and
13 lower the property value of the homes on Davis
14 Street and the surrounding area in San Leandro.

15 This does not make sense to a person like
16 me. I don't belong to an association or anything.
17 When we have the option to get rid of this material
18 at a different location, why should you dump it in
19 this location, affect my property value, affect my
20 friends and neighbors?

21 That's all I have to say. Thank you.

22 COL. CARDOZA: Mr. Tam, followed by
23 Burt Peterson.

24 COL. CARDOZA: You have three minutes
25 left, Mr. Tam. No, I'm just kidding.

1 MR. TAM: My name is David Tam. I am a
2 resident of the City of Oakland and a very active
3 environmentalist, especially in solid waste and
4 recycling and landfill issues.

16

5 Your environmental impact statement is,
6 unfortunately, very deficient with respect to
7 consideration of landfill alternatives. You, in
8 your introductory remarks, kind of said that 23
9 sites had been narrowed down to eight. There is no
10 indication of the logic by which any of the 15 sites
11 were rejected. And specifically, there are two
12 landfill sites in eastern Alameda County, Vasco
13 landfill, three miles north of Livermore; and the
14 Altamont landfill, six miles northeast of Livermore,
15 which probably, with some modification, could
16 basically be up and running on your time line to
17 accept these dredge spoils.

18 It is my belief that the containment
19 structure for containing the water that will be
20 running off from this admittedly wet material that
21 would be hauled out there would have to be required,
22 and that would be some additional marginal cost.

17

23 I was struck by the inspection of the
24 table, I believe it is Table 7-4, which is sort of
25 the logic after the fact for deciding on the

18

33

1 preferred so-called normally superior alternative,
2 which is option B-2, I believe.

3 Yes. It's on page 7-4. It's Table
4 7.2.1-1.

5 It's kind of a funny table because
6 disposal alternative could -- one, which says, "Use
7 of the port/landfill disposal option as part of any
8 disposal alternative would occur only if required by
9 the RWQCB." Well, it could also occur if basically
10 the Port of Oakland had the good sense to do
11 something like that.

12 And so at the Sierra Club meeting on the
13 31st of March, I asked one official from the Port,
14 basically, "What about that?" And the comment was,
15 essentially -- this was an unofficial comment, but I
16 think it was indicative of the approach of the
17 Port -- "Well, we would only -- we've really got the
18 bonding capacity of about \$500 million, and we can't
19 go much more than 143,000,000."

20 Well, that struck me as inherently -- it
21 sounded plausible. But I ran some little numbers in
22 my head. I really hadn't investigated this more
23 than that. That basically currently it costs about
24 \$7.00 a ton to haul any kind of material from the
25 880 corridor -- actually 80 -- I believe the 580

1 corridor through the landfill areas of eastern
2 Alameda County. We happen to know this because
3 other solid waste disposal projects were being
4 considered and they included hauling something even
5 less dense than sludge -- than dredge spoils.

6 Seven dollars a ton is about, oh, \$5 a
7 cubic yard. You've 1.3 million cubic yards here.
8 You looking at about \$6.5 million additional haul
9 cost to take it out to the landfill and dry it out
10 there.

11 I have no idea what it costs to build
12 adequate containment structures to contain the water
13 that will be, basically, draining off on the
14 landfill, rather than on the golf course. But it's
15 probably going to be about the same. Maybe it's
16 more. Maybe it is \$2 million more.

17 So we're looking at \$98.5 million, and
18 that doesn't exactly blow it off of the charts, does
19 it? We're looking at maybe \$151 or \$152 million.

20 There has been a great deal of concern, I
21 think, that the dredging -- not the delay. I have
22 been a resident of Oakland or its neighbor,
23 Berkeley, for the last 25 years, and I share that
24 concern. I think we can do it right. And I think
25 we can do it in a way that is both environmentally

1 sensitive, socially and economically sensitive, and
2 basically does the right thing.

3 And by the way, incidentally, it would
4 create additional jobs because of the Teamster jobs
5 that are involved in hauling this material out to
6 one of these two landfills. I believe both of -- I
7 know that one of the two companies that's a dominant
8 company in Alameda County, waste management in
9 Alameda County, is a unionized company, for those of
10 us here in the union -- in the audience who are
11 supporters of members of the union movement.

12 I guess that, basically, is what I would
13 say. And we will be preparing written comments for
14 this.

15 Also, I'd like to direct a question
16 publicly. It was stated by the Secretary/Treasurer
17 of the Central Labor Council that the Sierra Club
18 would be accompanying him on a trip to Washington.
19 To the best of my knowledge -- and I think I could
20 be said to follow Sierra Club affairs very closely,
21 because I happen to be a member of the Executive
22 Committee of the San Francisco Bay Chapter -- no
23 such position has been taken as to the trip of any
24 Sierra Club representative to Washington in support
25 of disposal of dredge spoils on the Galbraith Golf

1 Course.

2 MR. MARRON: Requesting permission.

3 I don't appreciate being called a liar by
4 anybody, especially not Mr. Tam.

5 Mr. Richard -- Mr. Naismith went to
6 Washington with us last year.

7 COL. CARDOZA: Mr. Marron, thank you.
8 Mr. Marron. I have to interrupt you.

9 (Whereupon the decorum of the public
10 hearing was disturbed by a verbal argument between
11 Mr. Tam and Mr. Marron, each speaking over the
12 other; unreportable.)

13 COL. CARDOZA: Mr. Marron --

14 MR. MARRON: I'm sorry. I mean, I don't
15 appreciate this, David. I really don't. I've known
16 you for a long time.

17 COL. CARDOZA: Mr. Marron, we really need
18 to proceed with the meeting.

19 MR. MARRON: I don't appreciate you
20 publicly calling me a liar. You understand that?

21 MR. TAM: I'm not going to rise to your
22 provocation --

23 MR. MARRON: You made the provocation.
24 You're the one that's calling me a liar.

25 MR. TAM: That was not --

1 MR. MARRON: Yes, you did.

2 COL. CARDOZA: Mr. Marron, Mr. Marron,
3 please.

4 Mr. Tam, thank you very much.

5 Mr. Tam, please, your comments are over.
6 Thank you.

7 MR. TAM: Well, if I may --

8 COL. CARDOZA: Mr. Tam, please sit down.
9 I ask -- Mr. Marron -- I asked Mr. Marron to sit
10 down. He has complied.

11 If you don't sit down -- okay. Go ahead.
12 Call security. Okay.

13 Could you please sit down, Mr. Tam?

14 Thank you very much.

15 Again, I'll remind everyone that the
16 purpose -- I will remind everyone that the purpose
17 tonight is to receive your comments in a civilized
18 and a professional manner; not to debate these
19 issues. We've had plenty of meetings to do that.

20 We're into a formal process.

21 Thank you very much.

22 MR. PETERSON: My name is Burt Peterson.

23 COL. CARDOZA: Excuse me, but

24 Mr. Peterson, will you please sit down? I'm on a
25 roll here.

1 Actually, I just want to give the next
2 person a chance. Mr. James Birch will be the
3 follow-on speaker.

4 Excuse me, Mr. Peterson.

5 MR. PETERSON: I am Burt Peterson. I am
6 from Alameda. I'm a private citizen. I have no
7 comment at this time, but wish to have questions
8 later. 19

9 COL. CARDOZA: Thank you very much.

10 Mr. James Birch, and he will be followed
11 by Yvonne Ash.

12 MR. BIRCH: Thank you and good evening.

13 My name is Jim Birch. I represent the
14 New United Motor Manufacturing, Incorporated, in
15 Fremont, California, which is a joint venture
16 California corporation equally owned by General
17 Motors and the Toyota Corporation. We are
18 celebrating our tenth anniversary of the formation
19 of our company this month.

20 We have grown in the past ten years to be
21 the largest manufacturer in Alameda County,
22 employing over 4400 Teamsters. And I cite this as
23 just an example of the opportunity to create jobs in
24 the Alameda County area.

25 We produced over 325,000 cars and trucks

1 in 1993. We also exported over 27,000 cars, as well
2 as parts and components, to the Far East. Combined
3 employment with our California supplier base
4 represents over 12,000 jobs.

5 The exports of parts and finished units
6 exceeded \$400 million. Total annual domestic
7 payroll, in purchases, exceeded 1.7 billion, about
8 half of which is spent in property taxes.

9 A prime reason for the selection of
10 Fremont as NUMMI's location was the accessibility to
11 the Port of Oakland. Our volume of support and
12 export -- of import and export activities is an
13 essential element to NUMMI's reliability as a
14 competitive producer of automobiles and auto
15 components. Parts imported from Japan, alone,
16 account for approximately six percent of the Port's
17 imports.

18 The Port of Oakland is NUMMI's lifeline.
19 Continued viability of this port is critical to our
20 survival and our ability to compete in a highly
21 competitive segment of the auto industry.

22 The Port of Oakland's future viability
23 and competitiveness will greatly depend on its
24 ability to improve and expand its operation. NUMMI
25 is sensitive to its responsibilities in the

1 environmental area. Our company has achieved record
2 improvements in air emissions, reduction in use of
3 many chemicals, recycling, wastewater treatment and
4 other pollutions controls. We have received many
5 awards for these environmental activities, which we
6 have taken on on our own. Most recently, the
7 California Water Pollution Control Association had
8 awarded us the "California Plant of the Year" and
9 1993-94 winner of the Waste Reduction Awards
10 Program.

11 We feel that the environmental conditions
12 considerations given to this dredging project have
13 exceeded the basic standards that are normally
14 required. The Sonoma Baylands wetlands
15 demonstration project is a model of good economic
16 environmental policy. The use of the Galbraith golf
17 course to dispose of materials will have a
18 short-term inconvenience to golfers. However, as in
19 many business decisions, the long-term gain of a
20 first-class public golf course will be an improved
21 and more valuable asset to the community for years
22 to come.

23 NUMMI supports and encourages the
24 dredging necessary to keep the Port of Oakland and
25 the entire Bay Area a viable factor in the shipping

20

41

20 1 on the West Coast. Considering all of the factors
2 of business, jobs, economics, growth and recreation,
3 this is truly a win/win situation for all concerned.

4 Thank you.

5 COL. CARDOZA: Thank you very much.

6 Yvonne Ash. And she will be followed by
7 Hugh McKay.

8 MS. ASH: Good evening, Col. Cardoza and
9 Mr. Foster and others, everyone.

10 I am Yvonne Willis Ash, and I live in
11 Oakland. I've been teaching for 28 years at
12 Castlemont High School, where I teach biology.

13 We have a large percentage of our
14 enrollment living in or near Brookfield Village.
15 While teaching environmental sciences and natural
16 resources, my 10th graders have researched this
17 SF Bay, assessing whether or not it is or its
18 inhabitants are in peril.

19 Some of my students presented reports to
20 the class on "Is our SF Bay Filling in and How to
21 Prevent this From Happening." The dredging process
22 was shown and conclusions were drawn to its
23 importance when all environmental factors are
24 evaluated fairly.

21 25 When learning of the proposed spoils

1 dumping site, these are some of the concerns that
2 were raised: Why are they, Port of Oakland, you
3 say, going to dump this sludge on our neighborhood
4 golf course? My granddaddy, my dad, and now my
5 little brother play golf there all the time. Why,
6 yes, I've smelled it, and it's gross. Where? Over
7 there, near Martin Luther King, Jr. Memorial Grove.
8 After it rains, it stinks.

9 "I care about where my friends live,"
10 another said. Even though I live in Montclair, some
11 of my friends there, in the area we're talking
12 about, Brookfield Village, have asthma. And now
13 their parents are really worried. A hazardous waste
14 management specialist is concerned that when the
15 sludge dries, it will become airborne and cause or
16 aggravate upper respiratory disorders.

17 My added distress is habitat destruction
18 for Galbraith inhabitants and endangered species of
19 cacti, burrowing owls, and leafage. Who will
20 protect their rights to survive in the sludge pit of
21 muck and mire and doom?

22 And then some students say: "Why can't
23 the sludge be dumped somewhere else?" Where? Where
24 there is no -- where there is space? No one ought
25 to be hurt or harmed, and doesn't cost too much to

21 ↑ 1

get it there.

2 Finally, we offer this continuous natural
3 problem of sedimentation back to you: Those with
4 the power, the money and ethics as well, to make a
5 difference and ultimately do the right thing for all
6 in Oakland. And we thank you.

7 COL. CARDOZA: Thank you very much,
8 Yvonne.

9 I will risk an editorial comment here.
10 I've been personally involved in voluntary
11 educational programs at Castlemont, and compliment
12 them highly. It is really gratifying to see
13 somebody working with young people towards the
14 future.

15 Thank you, again, Yvonne. Wonderful
16 program.

17 Hugh McKay, followed by Paul King.

18 MR. MCKAY: Ladies and gentlemen, my name
19 is Hugh King, Hugh "Galbraith" McKay. My middle
20 name is Galbraith. I represent Galbraith Golf
21 Links. I am a partner at Galbraith.

22 I just want to take one moment. We have
23 a lot to cover this evening, and I want the golfing
24 community to have an opportunity to speak. But I
25 think there are some very important things that we

1 need to look at. I just want to read a little
2 excerpt that came out of the magazine printed
3 nationally called the "Golf Journal."

4 We had the editor -- or the author out at
5 the golf course for three or four days. He
6 interviewed the players at the golf course. He
7 interviewed people that live at the golf course.
8 And I just want to bring you a little message from
9 him.

10 It says, "Galbraith, with its
11 unprepossessing origins" -- sorry -- "its uncertain
12 future" --

13 COL. CARDOZA: Yeah. Perhaps you could
14 tilt the microphone up and speak into it a little
15 bit? Thank you.

16 MR. MCKAY: Okay. "...Galbraith is a
17 kind of laboratory of multiculturalism, a mix of
18 youth and age, of men and women, of African
19 Americans and Latinos, of Nisei and Anglos. E
20 Pluribus Unum. It's very Oakland. The place where
21 Gertrude Stein, were she to miraculously return,
22 would find Oakland there.

23 "Nowhere else in the United States have I
24 seen a purer expression of the St. Andrean spirit of
25 golf as a game of the people, as a center of social

1 life and recreation. People hang out at Galbraith.
2 It's not just a golf course; it's a community
3 center. It's the only golf course I have ever seen
4 where people -- in this case, it was a couple of
5 middle-aged men sitting at a table that looks out
6 over the driving range -- play chess."

7 He further stated -- and these are
8 available at the golf course -- "...Ransom/McKay
9 preserved and nourished the Galbraith's democratic
10 and egalitarian tradition. It may have been hard --
11 it may have been a hard place to grow good grass,
12 but Galbraith is an easy place to make friends.

13 "...the greens, though, are tricky and
14 sound. And the basic layout of the golf course,
15 designed by Bob Baldock, California's most prolific
16 golf course architect, is solid and demanding.

17 "...but I think of the camaraderie lost,
18 of the rare pleasure I felt at being in a place
19 where people linked only by golf had learned to care
20 about one another, to know each other's wives and
21 husbands and children. Perhaps I was fooled. Maybe
22 it's an illusion, but if so, it's one worth
23 pursuing.

24 "Besides, as I was leaving Galbraith,
25 tossing my clubs into the rental car, I caught

1 something familiar in the person getting out of the
2 car parked across from mine. I turned to say -- I
3 turned to get a better look. The license plate
4 read, 'SAYHEY6,' " but I didn't need any hints. Of
5 course, it was Willie Mays, come to hit balls.

22

6 "If ever there was a man of the people,
7 it's Willie Mays. And he, a member of some of the
8 Bay Area's finest country clubs, had come here. And
9 I doubt that the reason was the superb quality of
10 the range balls. It's just good being here with the
11 people."

12 I think with that, that I just want to
13 touch on one or two other items.

14 COL. CARDOZA: You have about ten
15 seconds, sir.

16 MR. MCKAY: Okay. I'll go fast.

17 I think we're talking about the image of
18 Oakland. We are not talking about the image of
19 Oakland itself. We're talking about the image of
20 the East Bay. We're talking about the image of the
21 airport. We're not against the dredging. We
22 support the dredging.

23

23 When we look at the entrance to the
24 airport, we are proud of that. Can we not develop
25 something now? Why wait five to seven years? Why

24

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24 1 not create something now?

2 We have that opportunity to do that with
3 some cooperation with agencies. And there are other
4 opportunities for other places to be dredged. I
5 think we should consider that.

6 COL. CARDOZA: Thank you.

7 Mr. Paul King, followed by Mr. Ferreira.

8 MR. KING: Good evening. My name is Paul
9 King. I am with P&D Environmental, and I live here
10 in Oakland. I've been retained by the operators of
11 the Lew F. Galbraith Golf Course, Ransom and McKay,
12 to review the EIR.

13 I've reviewed the EIR -- or the draft
14 EIR -- and I've found the following areas which are
15 either deficient or inaccurate, with respect to use
16 of the golf course as one of the disposal
17 facilities.

25 18 The areas which are either deficient or
19 inaccurate are as follows: The impact to the
20 displaced golfers has not been accurately or
21 adequately mitigated. The loss to the community of
22 the unique recreational facility has not been
23 addressed in the EIR at all. This is what Mr. McKay
24 was just alluding to a moment ago.

26 25 The impact to the image of Oakland has

1 not been addressed. Again, this is what Mr. McKay
2 was alluding to.

3 The impact on the community from trucking
4 in the golf course, associated with the use of the
5 golf course, has not been accurately or adequately
6 addressed.

7 The landfill -- The golf course is built
8 on a landfill. Proper closure of the landfill has
9 not been addressed in the EIR. Response of the golf
10 course to the weight of the dredge materials has not
11 been addressed in the EIR, sufficiently.

12 Impact of the lateral migration of
13 fluids, which are presently in the landfill, after
14 the landfill has been loaded with sediments, has not
15 been adequately addressed. These fluids contain
16 gasoline, diesel fuel, motor oil and chlorinated
17 solvents.

18 Federally mandated evaluation of the
19 impact to the low-income and minority neighborhoods
20 in the vicinity of the site has not been addressed.
21 I am referring to Executive Order 12898, issued by
22 President Clinton.

23 It is our belief that reevaluation of the
24 impacts associated with the use of the golf course
25 will show that use of the Leonard Ranch, which is

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1 one of the alternate sites identified in the EIR for
2 disposal of the mud, will make more sense.

3 These issues, which I have described, are
4 available on an issue sheet which is at the golf
5 course. Anyone can call and receive a copy.

6 My comments will be submitted, in
7 writing, before the close of the public comment
8 period.

32

9 I wish to emphasize that the operators of
10 the golf course are not opposed to the dredging
11 project. Ransom/McKay fully support the economic
12 development of Oakland. However, it is our belief,
13 again, that in light of the true and accurate impact
14 to the community and the environment as a result of
15 the use of the Galbraith Golf Course, the only
16 logical conclusion will be an alternate location,
17 and we believe use of the Leonard Ranch will be very
18 easy to do.

19 Thank you.

20 COL. CARDOZA: Thank you very much.

21 Mr. Ferreira will be followed by
22 Steve Goldbeck.

23 MR. FERREIRA: My name is Al Ferreira. I
24 was born and raised in Oakland. I still live in
25 Oakland. And what you're attempting to do with the

33

1 Galbraith Golf Course, I think it's appalling. One 33
2 gentleman over here said that it's going to be a
3 "temporary setback" as far as the golf course is
4 concerned. I don't have time for that. I won't
5 even be able to pick up a club, let alone swing, by
6 the time they get another course built, if they get
7 another course built there. I do not believe that
8 they ever will put another golf course back in that
9 vicinity.

10 If you have smelled the -- sampled the 34
11 mud taken from the Bay -- I've had the opportunity
12 to smell it a couple days ago -- this was just a
13 quart size that I smelled -- and it smells like
14 hell. What is 1.25 million cubic feet -- yards
15 going to smell like?

16 People living in the northern part of
17 San Leandro, from Williams to Oakland border, and
18 from Doolittle to San Leandro Street, and people
19 living in the southern part of Oakland, from Eighth
20 Avenue to San Leandro -- Doolittle to San Leandro
21 Street -- all will surely be affected.

22 People with asthma or other respiratory
23 problems will line up to start suing, just like the
24 citizens of Martinez are now suing for the stinking
25 conditions at the plant in Hercules.

1 Who is going to pay? Not the City of
2 Oakland. Is it going to be the Port? The
3 government? That's going to be another thing to
4 think about because you're surely going to have
5 people lining up.

6 I hope you aren't implying what the
7 requirements of the State and Federal law on air
8 quality -- putting that mud in Galbraith can touch
9 too many people adversely.

10 Mr. Toney I respect very much. He has
11 done very much. I have lived here 72 years, and
35 12 he's talking about 40. In reference to jobs, I
13 would like to see some guarantees for jobs. Bigger
14 ships mean more containers, I guarantee you that.
15 All it means, though, different bill of lading.
16 People ordering one container will order three.
17 Truck drivers from out of town haul most of these
18 containers, and will continue to do so. I believe
19 the statement "there will be 4,000 jobs" is a lot of
20 wishful thinking.

21 You people who have Oakland in your
22 hearts, work on cleaning up the crime, and the jobs
23 will follow. Thank you.

24 COL. CARDOZA: Steve Goldbeck, followed
25 by Mayola Lewis.

1 MR. GOLDBECK: Thank you, Colonel.

2 My name is Steve Goldbeck. I am with the
3 staff of the San Francisco Bay Conservation
4 Development Commission. Because the Commission 36
5 permit and consistency document will be needed for
6 the proposed project, the Commission, itself, does
7 not yet have a position on the project until it
8 receives an application and can consider it in
9 public hearing.

10 However, the staff recognizes the need to 37
11 deepen the Port of Oakland harbor to accommodate
12 deeper draft ships. And we are pleased with the
13 balanced disposal options that have been proposed as
14 part of the preferred alternative for this project.

15 We are particularly supportive and
16 pleased with the proposed construction of the Sonoma
17 Baylands titled "Wetlands Restoration Project" to
18 provide over 300 acres of tidal wetlands for___
19 endangered species.

20 We, of course, will be providing detailed
21 comments on this in the written form. Thank you.

22 COL. CARDOZA: Thanks a lot, Steve.

23 Mayola Lewis, followed by Dan Regan.

24 MS. LEWIS: Good evening. I would like
25 to introduce you to my grandson, Jesse Lewis, who

1 plays golf at the golf course, who is a straight GNE
2 student at Brookfield Elementary School. So he's
3 not there just because he really needs to go do
4 something to keep busy. He is busy.

5 I am here not representing the golf
6 course or the children who participate in the golf
7 program at Galbraith Golf Course. I live in East
8 Oakland, about five minutes from there, and I have
9 been there for 41 years. I own my own home, hoping
38 10 not to have to move. But I really don't want to
11 smell what you're going to put on the golf course.

12 I think all of us who live in East
13 Oakland, at the time that we moved to East Oakland,
14 as blacks, we could not buy any other place. We did
15 buy there. And ever since we moved into that
16 neighborhood, we had to a fight battle, a battle to
17 keep our neighborhoods safe for us, our property
18 values go up instead of down. And now you're going
19 to dump some mud, which --

39 20 I know you need the Port. You need all
21 of those things. But think about us. Five hundred
22 families live closer to the airport, five minutes.
23 Our children have enjoyed the golf course.

24 When I was a young girl growing up in
25 Oakland, there was no golf course for us. Little

1 girls, the boys and everyone else is enjoying
2 something. They're learning. They're having
3 experiences that they can live with for the rest of
4 their lives. They don't have to do anything else.
5 They can do those things.

6 I do believe that you need to look at the
7 citizens of Oakland and think about what's going to
8 happen to us. The 500 houses are located very
9 close, then you look at another 500, and that's a
10 thousand. And you're affecting more than a thousand
11 people right in that neighborhood. And I think you
12 need to think about it.

13 And we are concerned. And I'm concerned
14 for what happens to our children in Oakland.

15 Thank you very much.

16 COL. CARDOZA: Thank you.

17 Dan Regan, followed by Aart DeVos.

18 MR. REGAN: My name is Dan Regan. I'm
19 with the Alameda County Economic Development
20 Advisory Board. And we have been involved in the
21 dredging project for about three years, two and a
22 half years. Our role has been a little different
23 than some of the organizations that you've heard
24 tonight.

25 Our role started out, basically, as a way

1 to provide a venue, if you will, to bring people to
2 the table, to move dredging beyond the stalemate
3 that it was about two years ago. And one of the
4 things that we find particularly good about this
5 project, that we can endorse and go along with what
6 the Port and Corps of Engineers are attempting to
7 do, is three years ago, nobody talked about 300
8 acres of wetlands. Three years ago, nobody talked
9 about any place to take dredging, except in the Bay.
10 And that was not going to happen. No matter what
11 anybody would have liked, that wasn't going to
12 happen, for a lot of good reasons.

13 But since that time, we got people to the
14 table to talk about alternatives. The argument that
15 we used to get on the wetlands was, "Wetlands are
16 too expensive. Nobody can afford it. So we're not
17 going to pay attention to it." And we said, "Okay.
18 Fine. Let's go to Washington and get money to do
19 that." And if we can get money to do that, then we
20 can create wetlands. We can move beyond where we
21 are now.

22 And that's happened. And I'm -- we're
23 not taking full credit for that, obviously. We were
24 able to bring it right to people, to the table, to
25 go to Washington and talk about a different

1 approach. And I think that's what this involves.

2 You didn't have these alternatives three
3 years ago. You didn't have Leonard Ranch. You
4 didn't have Sonoma Baylands. You didn't have
5 Galbraith. You didn't have a lot of these options.
6 And I think we need to look at those options as a
7 way to move this forward.

8 And I realize that there are some
9 difficulties with that for each party, but let's be
10 a little realistic that we've got to move this
11 forward. And what I thought about, even though it's
12 a little bit a stretch of an analogy, I think it's
13 important. We've read in the papers recently about
14 how long it took to repair a freeway in L.A. Now,
15 dredging's a lot more difficult than that and a lot
16 more involved than that.

17 But I would say to you that the
18 collective efforts of all this can move this project
19 forward, so we're not all going to lose. And we are
20 not all going to win. But we are going to be able
21 to move forward. So we support the preferred⁴⁰
22 alternative. And we thank you for your time.

23 COL. CARDOZA: Thank you very much.

24 Mr. Aart DeVos, followed by John Shively.

25 MR. DeVOS: My name is Aart DeVos. I'm a

1 principal of Ransom/McKay Golf, Inc., operator of
2 the Galbraith Golf Course. I am here to express, in
3 addition to the other comments already made, the
4 concern of the loss of the golf course to the
5 community and the community impact thereof.

6 We don't want to repeat all the
7 statements that have been made by Mr. McKay and the
8 others. But the one fact that we do need to look at
9 is the rebuilding of the golf course. In the EIR it
10 was suggested the commitments that a new golf course
11 will be built five to seven years after the drying
12 period. No further comments are made about where
13 the golf course will be. There is no addressing of
14 the amount of fill required to build this golf
15 course. This is all to be left up in the future.

16 But what's addressed is a certain amount
17 of fill has to be brought in to protect the future
18 golf course maintenance workers from the
19 Environmental Commission's own filth, possible
20 toxins, possible fumes. And it uses a number of
21 200-some thousand cubic yards of cover required over
22 the mud.

23 If that is a fill for the golf course, it
24 is totally inadequate. And other people have spoken
25 to this in other meetings, but it should be

1 addressed in the EIR. It will totally affect the
2 amount of trucking in the neighborhood. And your
3 numbers, your evaluations, will totally change
4 making Leonard Ranch that much more attractive.

5 We don't know of all the delays in 42
6 Leonard Ranch. But there might be some delays here,
7 too, that we haven't even looked at; maybe half that
8 we're not familiar with as yet. The cost involved
9 is -- it's -- mitigatable.

10 Also, the people that are going to be 43
11 misplaced during, quote, the "short-term"
12 five-to-seven-year period -- you've heard from one
13 gentleman that that is too long. It's not a short
14 term. The mitigation that has been addressed
15 affects only 5,000 rounds out of the 70,000 rounds
16 played.

17 These rounds are seniors and juniors that
18 are residents of Oakland. There are 65,000 more
19 rounds. And the various clubs of the golf courses
20 sent us letters and fax, and we plan to submit some
21 documentation to that fact.

22 The real concern is not only the 44
23 temporary loss, it is the potential, possible
24 permanent loss. Will there ever be a golf course?
25 Oakland's had a fire. It's recovering from a fire.

44 1 Out of a fire, you can have a phoenix arise out of
2 the ashes. Out of mud, you have a poltergeist. And
3 we hope a new golf course, one we call poltergeist,
4 that there will be a golf course.

5 These issues that need to be addressed
6 need to be addressed at this time, not seven years
7 from now. Thank you.

8 COL. CARDOZA: Thank you.

9 John Shively will be followed by
10 Mr. Chuck Foster of the Port of Oakland.

11 MR. SHIVELY: I am John Shively. I've
12 been a member of the Sierra Club for 30 years. I am
13 not speaking for the Sierra Club, I'm speaking for
14 myself. And, unfortunately, I couldn't find my
15 notes, so I am speaking extemporaneously, you will
16 be relieved to know.

17 I am concerned for several things. One,
18 this has been portrayed as an issue of dredge or not
19 to dredge. And you've got a lot of people here
20 exercising their right to speak on that issue. I
21 don't think there's a person here, in this room, who
22 is opposed to the dredging and doing it as soon as
45 23 possible. I think the real issue is what you're --
24 where this is going to be disposed. And I think
25 both the Corps and the Port have made a peremptory

1 decision to put these spoils on Galbraith.

2 And what concerns me is that the
3 consultant has really worked to justify this. And
4 one of the indications of this is the sampling that
5 was done of the material to be dredged. The core
6 samples are unrealistic. They take a sample that
7 starts at the surface and goes down the full depth
8 and mixes it all together.

9 That is not the way the material is going
10 to be dredged. It's not going to come out that way.
11 It's going to come out incrementally and
12 progressively. And it should be dealt with
13 separately. And it should be identified.

14 I don't think that the samples were
15 properly taken. I think they should go back and do
16 it correctly. And I do think there are
17 alternatives. I don't want to see the Port and the
18 Corps appear to be imperious in this matter. I
19 think it should be open-minded. There are a lot of
20 people going to be affected.

21 If you can do the job better, please do.

22 COL. CARDOZA: Thank you.

23 Mr. Chuck Foster.

24 MR. FOSTER: Thank you, Col. Cardoza.

25 My name is Chuck Foster. I'm the Deputy

1 Executive Director of the Port of Oakland.

2 The Port of Oakland would like to thank
3 each of you for attending tonight's public hearing
4 on the 42-foot project.

5 As most of you are aware, dredging of the
6 42-foot channel is critical to the future of the
7 Port. Dredging is equally significant to the
8 short-term, long-term economic health and well-being
9 of the City of Oakland and of the Bay Area region.

10 The Port of Oakland is an economic engine
11 on the cutting edge of moving the entire city and
12 our community into the 21st century. The U.S. Army
13 Corps of Engineers and the Port have worked on this
14 project for over 20 years. We have considered over
15 30 potential disposal sites. And we believe that
16 the Galbraith Golf Course, the Ninth Avenue
17 terminal, the Sonoma Baylands and ocean disposal
18 represent the best combination of alternatives.

19 We at the Port take our responsibility of
20 creating jobs for our community and protecting the
21 environment very seriously. We at the Port have
22 listened to the concerns that have been expressed by
23 the community, and have voluntarily conducted a
24 human health risk analysis. And I am pleased to
25 report to you that this analysis finds no human

1 health risk to the community from disposal of this
2 dredge material on the Galbraith site.

3 I do regret having to take the Galbraith
4 Golf Course out of service for a five- to seven-year
5 period. After a long-term intensive review, we have
6 determined that Galbraith Golf Course is effectively
7 our only reasonable choice. As I said earlier, the
8 human health risk analysis results -- result, I
9 should say, showed the material is safe.

10 In terms of rebuilding the golf course,
11 we have made a solid commitment with the City of
12 Oakland to rebuild a first-class golf course. An
13 advisory committee comprised of the City, of the
14 Port, of the community and the golfers have been
15 established to oversee the future design of an
16 improved golf course. And these discussions are
17 taking place at this time.

18 We are also reviewing a mitigation
19 proposal for displaced Oakland golfers. This
20 committee has also begun to meet to discuss this
21 issue.

22 In closing, I have -- or I would like to
23 express our appreciation to each of you, again, for
24 participating in this process.

25 Thank you for attending the meeting

1 tonight. And we look forward to receiving your
2 comments and to responding to those comments in the
3 final EIR. Thank you.

4 COL. CARDOZA: Thanks a lot, Chuck.
5 Excellent.

6 That, of course, exhausts our list of
7 speakers that have indicated a desire to speak. And
8 I want to make sure: Is there anyone in the
9 audience who has a few more comments we haven't
10 heard from yet?

11 Sir? Again, please, state for the record
12 your name, and fill out the card.

13 MR. GRAVES: My name is Grayson Nelson
14 Graves. And I've been a Teamster for 35 years and
15 driven trucks through and around Oakland and sucked
16 up people's exhaust fumes for a long, long time.

46 | 17 I'm retired out of Local 17. And
18 Galbraith is my little bit of the rock. It's all I
19 can afford. And I have spent most of those 35
20 years, ever since Galbraith was conceived, playing
21 golf there. I'm not a member, but I do enjoy it.
22 And I have other reasons, other than golf.

23 I have a lot of friends there who are
24 ducks and geese and muskrats and things. And a lot
25 of them I've known for so long, I almost know them

1 by their first names. I know where they all hang
2 out.

3 I have snuck in there and caught striped
4 bass on occasion. I've gone out there and chased
5 snakes all over the place. That is one of the
6 myriad of things I have done out there. And my
7 motives, as you can see, are pretty selfish because
8 that's my real concept of what pure pleasure is.
9 And to have that defecated on by you people really
10 infuriates me because I know that you have
11 alternative sources.

12 I don't resent the fact that people are
13 going to get jobs, even though I do know from
14 experience of being a Teamster, that most of the
15 jobs hauling in containers will probably go to Joe,
16 Mike and Sam, who own their own rigs and live in
17 Tracy and Manteca and Livermore and places like
18 that, and they'll be the ones to benefit from it.

19 But jobs are jobs. And people do pay
20 taxes. And people use the freeways in that area.
21 And I guess it is important for the economic
22 structure of this area. I've lived here most of my
23 life, and this is one part of my life that I can see
24 closing down on me.

25 People toss and banter seven-year

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1 increments around like they're nothing. I guess
2 they're all related to Methuselah because I'm
3 certainly not. Seven years is a pretty good chunk
4 of my life. I'm 58 years old now. And I have a lot
5 of serious physical problems, so I don't have the
6 options available of other people of leaving the
7 area and going someplace else.

8 So when you say seven to ten years,
9 you're speaking of a lifespan for me. To take
10 something like that away from me when I know that
11 you can put it someplace else is, like I said
12 before, infuriating.

13 I belong to the Sierra Club. I belong to
14 Lalone Society (phonetic). I go to Yellowstone
15 whenever I get the chance. I belong to all kinds of
16 environmental eco groups, and I'm one of those
17 weirdos, just like the rest of them. My brother is
18 a logger, and we've gone to blows over things many
19 times. My brother's got a couple of missing teeth
20 as the result of arguments with me.

21 But I'm older now, and I know that only
22 talk and time will solve and make solutions and
23 create things for people to get along equitably when
24 fists don't work anymore, even though I am inclined
25 sometimes. I really get PO'd.

1 So I just thought I'd get my little two
2 cents in. I'm not one of your experts, but it
3 affects me. And it affects me emotionally, as you
4 can see. Thank you.

5 COL. CARDOZA: Thank you.

6 Who else would like to speak?

7 Again, please carefully state your name
8 clearly, for the record.

9 MS. HAWKINS: My name is Joy L. Hawkins.
10 And I work for Galbraith Golf Course. I've been
11 there for about a year.

12 The EIR report did address places for the
13 golfers -- the golfers to go. The one thing that it
14 didn't address was the employees. We have, maybe,
15 20 employees at the golf course. And I know those
16 20 employees aren't as important as 4,000 jobs for
17 the citizens of Oakland. But my job is important to
18 me. That's the way I live. I have no one else to
19 support me, and in September, I will lose my job.
20 And I just think that the EIR report should address
21 those 25 jobs that are going to be lost. Thank you.

22 COL. CARDOZA: Thank you.

23 Anyone else?

24 Again, I also echo Mr. Foster's comments,
25 and that I would like to thank you very much for

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1 coming tonight. Your comments are important. These
2 are serious issues. And, of course, we will address
3 them as we continue with the process.

4 Thank you, again.

5 (Hearing concluded 9:00 p.m.)

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R E P O R T E R ' S C E R T I F I C A T E

--oOo--

STATE OF CALIFORNIA)

COUNTY OF NAPA)

I, Heidi Ryder Simpson, a Certified
Shorthand Reporter in and for the State of
California, certify that I was present at the time
and place as stated in this Reporter's Transcript
and took down in machine shorthand portions of the
proceedings requested in the within-entitled cause;

And that I thereafter transcribed my
shorthand notes into typewritten form;

And that the foregoing transcript pages
numbered 1 through 68 is a complete, true and
correct transcription of the proceedings.

IN WITNESS WHEREOF, I have subscribed this
certificate at St. Helena, California on this
day of 5/2/94

Signed: _____

Heidi Ryder Simpson

HEIDI RYDER SIMPSON
CSR 10053
State of California



United States Department of the Interior

NATIONAL PARK SERVICE

GOLDEN GATE NATIONAL RECREATION AREA
FORT MASON, SAN FRANCISCO, CALIFORNIA 94123

IN REPLY REFER TO:

L76 (WR-GOGA)

APR 28 1994

Roger Golden
Corps of Engineers
Environmental Branch
211 Main Street
San Francisco, CA 94105

Dear Mr. Golden:

- 1 | We have reviewed the Draft Supplemental EIR/EIS for the Oakland Harbor Deep-Draft Navigation Improvements. Golden Gate National Recreation Area supports the selected plan and concurs with the decision to eliminate the Alcatraz disposal site as an alternative. The Alcatraz site is within the park boundary and disposal of dredged materials is incompatible with National Park Service policy.

Thank you for the opportunity to comment. Please contact Cicely Muldoon of my staff at 556-1008 if you have any questions about these comments.

Sincerely,

Brian O'Neill
General Superintendent

cc: Ed Ueber, GFNMS

United States Department of the Interior

OFFICE OF THE SECRETARY
Office of Environmental Policy and Compliance
600 Harrison Street, Suite 515
San Francisco, CA 94107-1376

ER 94/219

May 5, 1994

Col. Leonard E. Cardoza
U.S. Army Corps of Engineers
211 Main Street
San Francisco, California 94105-1905

Dear Col. Cardoza:

The Department of the Interior (Department) has reviewed the Draft Supplemental Environmental Impact Statement (DSEIS) for Oakland Harbor Deep-Draft Navigation Improvements, Alameda County, California. The following comments are for your use in preparing the final document.

Hydrology, Groundwater, and Water Quality

Decanted water from contaminated sediment will drain into the Bay. How will this contaminated effluent affect groundwater and baywater quality? What sort of management and engineering designs are planned to reduce contamination below water quality standards?

The rationale for excluding chromium as a criterion for wetland creation suitability needs to be explained.

On page 4.2-12, the third paragraph in section 4.2.3.3 that begins with "Lee's evaluation..." seems to suggest that only sediment suitable for cover will be used to create wetlands, both as cover and non-cover material. However, the next paragraph seems to indicate that material not suitable for cover might be buried three feet and topped with "cleaner" sediment. This inconsistency needs to be clarified.

The use of hydraulic cutterheads instead of clamshell dredges might reduce inadvertent sediment suspension during dredge operations and alleviate negative impacts that increases in turbidity might cause.

Biological Resources

Since the project is located along the Pacific Flyway, it is safe to assume that migratory shorebirds will be attracted to newly created settling ponds. How will they be impacted by contaminated water at disposal sites, and what sort of mitigation is planned?

Additionally, the Department is concerned that bioaccumulation of polycyclic aromatic hydrocarbons (PAHs), pesticides, polychlorinated biphenyls (PCBs), metals, and tributyltins (TBTs) has been shown in laboratory tests. The final document should discuss what measures will be taken to minimize any bioaccumulation of toxins.

7 | Overflow from barge activity might have a detrimental effect on the plankton community. While the increase in turbidity will be temporary and short term, it is expected to occur regularly throughout the life of the dredging project. The Department feels that this unnecessary impact could easily be mitigated by eliminating barge overflow.

8 | The Department recommends halting dredge activities during spawning periods to minimize adverse effects on fish.

9 | Additionally, the Department is concerned that suspended contaminants and increased turbidity will negatively impact the fish community. The possibility of bioaccumulation of chemical contaminants, because of the already high level of bioaccumulation, needs to be examined in more detail.

Monitoring

It is particularly important that the results of planned actions, mitigations, and monitoring actually be used. Knowing what works and what doesn't must lead to adaptive management, i.e., using this information and knowledge to appropriately continue or change what you are doing to manage the resources.

10 | The final document should discuss in some detail the mechanisms have devised to identify and commit budgetary and organizational resources to both the monitoring and adaptive management of the project. We would be happy to assist you in this process if you so desire.

Cumulative Effects

11 | The final document needs to discuss the cumulative impacts in much more detail. The section in the DSEIS only covers effects that were previously addressed in other sections of the document. How will the combined impacts of noise and toxicity, although each individually may have insignificant effects, affect shorebirds during breeding season?

12 | Will the increase in turbidity combined with the physical disturbance of dredge activities create any undue hardships for the fish population? These sorts of issues should be examined and discussed in detail in the final document.

Draft Coordination Act Report

The following comments are in response to Appendix H of the SDEIS.

Oakland Harbor

13 | 1. To minimize the spread of toxic materials, contaminated areas must be dredged first, followed by uncontaminated areas.

14 | 3. and 4. Monitoring of dredging activities is important. However, pre-emptive mitigation to prevent anticipated impacts is more effective. Dredging activities should be suspended during critical spawning and breeding seasons.

6. The Fish and Wildlife Service (FWS) is available for consultation in regards to specific compensation measures for the dredging project. | 15
7. The compensation recommended by FWS is justified from a regional perspective. This project, as well as other local projects, have a cumulative effect that this compensation attempts to remediate. | 16

Sonoma Baylands

- 2.b. All construction work should be halted during the California clapper rail nesting season. | 17
- 2.d. Marking powerlines to decrease mortality and injury to birds is important. This modification will enhance the overall project and the utility of the newly created wetlands. | 18
- 2.e. Only use sediments for wetland creation that meet the toxic threshold established by FWS. | 19
- 2.g. Ensure that the potential for bioaccumulation is as minimal as possible. | 20

Galbraith Golf Course

- 3.a. Take all feasible measures to contain contaminated effluent on site. | 21
- 3.b. Consider depositing a thicker layer of "clean" sediment on top to prevent exposure to wildlife. | 22

Additional Disposal Sites

Appendix H reprints a truncated version of the DCAR. The Department recommends that the specific comments for the sites not covered in Appendix H be implemented as stated. | 23

Disposal Sites

Leonard Ranch:

Groundwater Contamination

The phrase "appropriate management and controls" (4.2-33) is vague and needs further explanation. Specifically, what management decisions and controls will be made to minimize groundwater pollution? | 24

Adverse impacts to groundwater are not expected to be significant, as stated on lines 4-7, page 4.2-34. However, the possibility that chemical pollutants might enter the groundwater needs to be addressed. | 25

While Leonard Ranch is connected hydrologically to Sonoma Baylands, the effects of lateral flow from Leonard Ranch on Sonoma Baylands has not been addressed. This is particularly important if Leonard Ranch is to be used to dry contaminated spoils. | 26

- 27 | If indeed toxic spoils are to be dried at this site, what mitigation measures to prevent contamination will be implemented?

Surface Water

- 28 | Surface water will drain into Sonoma Baylands after storms. Will this have similar impacts as groundwater and what type of mitigation and prevention is planned?

Galbraith Golf Course:

Groundwater

- 29 | The major concern here seems to be related to salt water intrusion of the drinking water. The presence of brackish water would seem to indicate that this is already occurring; the project will probably not increase groundwater salinity. However, the possibility of chemical contamination and any negative effects must be examined.

Surface Water

- 30 | It is stated that decanted slurry water will be drained through the wetlands near Airport Drive. How this will affect the wetlands, and whether the decanted water will be chemically contaminated, is not stated. Additionally, what sort of monitoring and evaluation are in place to ensure that effluent meets Regional Water Quality Management District standards?

Sonoma Baylands:

Biological Resources

- 31 | The project calls for disposal of non-cover material at Sonoma Baylands. Even with a buffer layer on "clean" cover material, studies show that these buried contaminants might be exposed and become available to biological resources (DCAR, 70). For this reason, it is important to only use materials that are suitable for cover material in wetland creation.

Montezuma Wetlands:

Groundwater

- 32 | The Department is concerned about impacts to groundwater that might occur if non-cover material is used for wetland creation. Even with sufficient cover by clean material, these contaminants might still enter the system.
- 33 | The current layer of soil may form an impermeable layer that would prevent arsenic, TBT, and mercury from infiltrating groundwater. However, the possibility of these contaminants remaining in the hydrologic cycle and becoming biologically available still needs to be addressed.

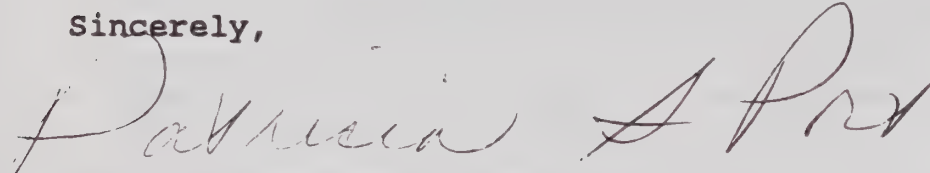
Surface Water

The Department is concerned that copper, TBT, and arsenic will become increasingly available as the hydraulic head created in disposal moves these contaminants toward the Sacramento River and Suisun Bay.

34

We appreciate the opportunity to comment.

Sincerely,



Patricia Sanderson Port
Regional Environmental Officer

References:

U.S. Fish and Wildlife Service, Draft Act Coordination Report (DCAR), February 14, 1994.

cc: Director, OEPC w/original incoming
Regional Director, FWS Portland



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105

May 2, 1994

Mr. Roger Golden
Corps of Engineers
Environmental Branch
211 Main St.
San Francisco, CA 94105

Dear Mr. Golden:

The Environmental Protection Agency (EPA) has reviewed the Draft Supplemental Environmental Impact Statement (DSEIS) for the project entitled **Oakland Harbor Deep-Draft Navigation Improvements**. Our review is provided pursuant to the National Environmental Policy Act (NEPA) [42 USC 4231 et seq.], Council on Environmental Quality (CEQ) regulations [40 CFR Parts 1500-1508] and Section 309 of the Clean Air Act.

The Corps of Engineers proposes to deepen 4.0 miles of the Oakland Inner Harbor channel and 3.4 miles of the Outer Harbor channel to -42 feet mean lower low water (MLLW) to accommodate deep draft ships; widen the channel in several locations; construct a turning basin in the Inner Harbor; widen the turning area in the Outer Harbor; deepen several berthing areas to -42 feet MLLW; relocate existing submarine utilities; and remove existing pier structures in the vicinity of the project construction area. The DSEIS evaluates the impacts associated with the disposal of an estimated 5.8 million cubic yards of dredged material to be excavated from the Harbor channels and berthing areas.

Disposal site alternatives include several open water and upland disposal options. These options could be implemented separately or in combination, depending upon the nature of the sediments that each disposal site can accept and the respective disposal site capacity. The preferred alternative consists of disposal of 1) 1.8 million or more cubic yards of sediment at EPA's Section 102 ocean disposal site; 2) up to 2.6 million cubic yards of sediment at the proposed Sonoma Baylands restoration site and 3) up to 1.4 million cubic yards of sediment at the site of the Galbraith golf course in Alameda County. Other disposal site alternatives include confined aquatic disposal at Bayfarm Island borrow area and Montezuma wetlands restoration site.

EPA has been actively involved in the Oakland Harbor Deepening project for several years and has reviewed and commented on each of the previous NEPA documents for dredge and

disposal of Oakland Harbor sediment. In addition, we have completed sediment quality determinations for all project sediments, which formed the basis for the alternatives analysis and many of the impact evaluations presented in the DSEIS. In general, the DSEIS is responsive to our scoping comments (Letter of July 12, 1993, from Jacqueline Wyland to Lt. Col. Leonard E. Cardoza) and addresses most of the issues, alternatives, and potential impacts associated with the Oakland Harbor Deepening project. The DSEIS's portrayal of EPA's sediment quality determinations for the project is generally accurate and appropriate. In particular, we support and concur with the¹ identification of "Alternative B2" as the proposed action.

Based on our overall review, we have assigned the DEIS a rating of **EC-2 (Environmental Concerns-Insufficient Information)**. This EC-2 Rating is further defined in the attached "Summary of the EPA Rating System." We have assigned the EC-2 rating because the DSEIS does not sufficiently examine the impacts associated with the Bay Farm Borrow site and the Galbraith Golf Course site and because additional information is needed to support various conclusions made in the DSEIS. For example, EPA has not received a copy of the draft Human Health Risk Assessment for the potential upland disposal sites, and therefore cannot comment on that document's adequacy to support certain conclusions reached in the DSEIS. Our detailed comments are enclosed.

We appreciate the opportunity to review and provide comments on the DEIS. Please send one copy of the Final Environmental Impact Statement to this office at the same time it is officially filed with our Washington, D.C. office. If you have any questions, please feel free to contact me at (415) 744-1574, or have your staff contact Edward Yates at (415) 744-1571 to discuss NEPA issues and Brian Ross at (415) 744-1987 to discuss issues related to sediment characterization and disposal site characterization.

Sincerely,



David Farrel, Chief
Environmental Review Section
Office of Federal Activities

enclosures (3)

MI#-001124

File Name: OAKHB3.DEI

cc: Jody Zaitlin, Port of Oakland
James Bybee, NMFS, Santa Rosa
USFWS, Sacramento
CDFG, Menlo Park
SCLDF, San Francisco
P & D Environmental, Oakland

SUMMARY OF RATING DEFINITIONS AND FOLLOW-UP ACTION

Environmental Impact of the Action

LO-Lack of Objections

The EPA review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

EC-Environmental Concerns

The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental impact. EPA would like to work with the lead agency to reduce these impacts.

EO-Environmental Objections

The EPA review has identified significant environmental impacts that must be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

EU-Environmentally Unsatisfactory

The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of environmental quality, public health or welfare. EPA intends to work with the lead agency to reduce these impacts. If the potential unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommend for referral to the Council on Environmental Quality (CEQ).

Adequacy of the Impact Statement

Category 1-Adequate

EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis or data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

Category 2-Insufficient Information

The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses, or discussion should be included in the final EIS.

Category 3-Inadequate

EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the NEPA and/or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

*From: EPA Manual 1640, "Policy and Procedures for the Review of Federal Actions Impacting the Environment."

Background

In 1990, EPA joined with the Corps, the Regional Water Quality Control Board (RWQCB), and the Bay Conservation and Development Commission (BCDC) to initiate development of a Long Term Management Strategy (LTMS) for San Francisco Bay area dredging projects. The LTMS goals include maximizing the reuse of dredged material for beneficial purposes, while ensuring that overall dredged material management is both environmentally and economically sound. Appropriate identification and disposal of contaminated sediments is integral to the LTMS approach. The incorporation of the Sonoma Baylands wetlands enhancement project into the overall Oakland Deepening Project is a significant step forward for this combined state-federal effort to implement comprehensive management of dredging and dredged material disposal projects in the area. It ensures that the Oakland Harbor Deepening Project will result in significant environmental and economic benefits to the region. At the same time, the selected alternative appears to provide appropriate management of the potential environmental and human health risks associated with the project's contaminated sediments.

Alternative B2 is identified in the DSEIS as the Environmentally Preferred Alternative, and has also been designated the National Economic Development (NED) Alternative. The Corps (and the Port of Oakland as lead CEQA agency for the EIR) are to be commended for the significant effort that went into producing the DSEIS within the President's target timeline for the project.

Alternatives

The FSEIS should include additional analysis regarding the comparison of alternatives. CEQ regulations require that an agency present the alternatives in "comparative form" (40 CFR 1502.14). While the DSEIS thoroughly evaluates the various disposal sites, the document does not present the various alternative packages in a comparative form. Specifically, the FSEIS should compare the impacts of No Action alternative to the impacts of disposal to upland and aquatic sites. The FSEIS should also include an assessment of the social impacts of locating a disposal site at Galbraith Golf Course in comparison with the economic impacts of No-Action and use of other upland disposal sites such as Leonard Ranch (see discussion below under §4.7.4.6).

Specific Comments on the DSEIS

§2.2.2, *Associated Maintenance Dredging Requirements*

The FSEIS should note that future maintenance dredging may

4 also be regulated under the Marine Protection, Research, and Sanctuaries Act to the extent that the LTMS Management Plan directs disposal of such material to the deep ocean disposal site rather than to in-Bay sites.

§2.4.1, *Determination of Sediment Suitability for Aquatic and Non-Aquatic Disposal*

5 We suggest using the wetland suitability tests performed by the Corps Waterways Experiment Station (WES) as well as the RWQCB interim sediment screening criteria. While the WES criteria are described as being conservative and "overestimate bioaccumulation in wetland plants and animals," they are more realistic measures of potential effects of using Oakland Harbor dredged material for wetland restoration than the RWQCB criteria. The WES data come from direct biological testing of the proposed sediments, whereas the RWQCB screening criteria themselves do not.

§2.6.2.1, *Cargill West Wetlands*

6 The DSEIS states that since the Cargill West ponds are not significantly subsided they would have little "need" for dredged material. The evaluation should be based initially on capacity for dredged material disposal (rather than capacity based on tidal wetlands restoration). This site compares favorably to Sonoma Baylands and other sites in terms of potential disposal capacity, according to the LTMS study cited (which is now completed). While other considerations (such as availability relative to the construction schedule) may also render the site not practicable for the Oakland Deepening Project, the very limited discussion of this potential site is insufficient to exclude it from further consideration. The FSEIS should provide an expanded discussion based on the LTMS report.

§2.6.3.2, *Richmond Dry Docks*

7 The final sentence of this section should be revised as follows: "However, the site is now being considered for disposal of contaminated sediments associated with both an EPA Superfund site cleanup and with the Port of Richmond Deepening Project, and is thus not available for use for the Oakland project."

§2.7.2, *Alcatraz*

8 The entire volume of suitable Oakland Deepening Project sediments could theoretically be disposed at the existing Alcatraz disposal site without violating the current annual and monthly disposal volume limitations. However, the FSEIS should acknowledge that many other projects compete for the limited available in-Bay disposal capacity. It is highly unlikely that all disposal capacity at this in-Bay site could be reserved for the Oakland project and if it were, the impacts to other users and projects would need to be evaluated in this project EIS.

§2.8, *Categories of Disposal Alternatives (Dredging Assumptions)*

9 Dredging Assumption #3, regarding the presence of potentially suitable Merritt sand beneath unsuitable sediments,

notes that the Corps and EPA are currently consulting to make a determination. This section should be updated to reflect that a determination has in fact been made. This determination is accurately reflected in DSEIS §4.2.6.2: EPA has concurred that undisturbed Merritt sand formations are suitable for ocean disposal provided that the mitigation measures listed there are fully implemented.

§3.0, *Affected Environment*

Two "Key References" should be added regarding the Ocean Section 102 Disposal Site and their contents should be fully reflected in the FSEIS: 1) EPA's Proposed Rule for designation of the deep ocean disposal site (Federal Register, Volume 59, Number 33, pages 7952 to 7961, dated February 17, 1994); and 2) EPA's proposed Site Management and Monitoring Plan for the deep ocean disposal site (EPA Public Notice dated April 20, 1994).

EPA has never received all of the cited references regarding the Bay Farm Borrow Area from the Corps. Please provide us with all the listed documents.

§3.2.4.3, *Bay Farm Borrow Area (Hydrodynamics)*

A specific and thorough understanding of local hydrodynamics is one of the most important factors in selecting an appropriate site for Confined Aquatic Disposal (CAD) of contaminated dredged material. The ability of cap material, of whatever initial thickness, to remain in place to permanently isolate the contaminated material beneath it is critical to the success of CAD. The more maintenance required (in the form of periodic replacement of eroded cap material), the more likely that re-release of contaminants to the aquatic environment will occur over the long run. EPA believes that, with proper site selection and engineering design, CAD can be an important and cost-effective tool in an overall, environmentally responsible dredged material management plan. However, the information available to EPA to date is insufficient for determining whether the Bay Farm Borrow Area is well suited for CAD. In particular, as the DSEIS itself points out in this section, very limited current velocity, current direction, and wave height data exists for the Bay Farm Borrow Area. Current meter deployments for the DSEIS were apparently limited to a one-week period in March, 1993.

As stated in our scoping comment letters and at various LTMS forums, EPA recommends that ongoing evaluation of CAD, as a potential dredged material management tool for the future, be specifically incorporated into the LTMS process. A hydrodynamics-based analysis of potential CAD sites (not limited to opportunistic/tempting, existing "holes" such as the Bay Farm Borrow Area) could then be systematically undertaken.

Table 3.3.2.2-1, *Mean Conventional and Contaminants Data for Proposed Oakland Harbor Dredged Sediments*

This summary table should include a footnote clarifying the

13 origin of its values. It is unclear whether the values are simple means of the Appendix A data points, or whether they are adjusted for the volume of dredged material represented by each sample station. Volume-adjusted means would be more meaningful for public understanding of the general degree of contamination in sediment from the various areas of the project.

Chapter 4, *Environmental Effects and Mitigation Measures*

14 Two "Key References" should be added regarding the Ocean Section 102 Disposal Site, and their contents should be fully reflected in the FSEIS discussions: 1) EPA's Proposed Rule for designation of the deep ocean disposal site (Federal Register, Volume 59, Number 33, pages 7952 to 7961, dated February 17, 1994); and 2) EPA's proposed Site Management and Monitoring Plan for the deep ocean disposal site (EPA Public Notice dated April 20, 1994).

§4.1.4.6 *Air Quality-Galbraith Golf Course.*

15 The FSEIS should further address the issue of generation and mitigation of objectionable odors and dust at the Galbraith Golf Course site. For instance, the FSEIS should clearly describe the impacts to the community of additional PM₁₀ emissions. In keeping
16 with Executive Order 12898, the document should ascertain whether the community is an at risk community, that is, whether high levels of respiratory or lung problems exist and whether they could be exacerbated (see further discussion below - §4.7.4.6).

17 Concern about potential odor has been voiced repeatedly at recent public meetings by residents who live near the golf course and mitigation measures are not fully described. Discussion of mitigation measures could include evaluation of other existing dredged material drying sites including those at San Leandro, at the Port Sonoma Marina, and adjacent to the upper Petaluma River channel. See further discussion of air quality in §4.9, below.

§4.2.6.2, *Mitigation Measures*

18 EPA concurs that undisturbed Merritt sand formations are suitable for ocean disposal provided that the mitigation measures listed in §4.2.6.2 are fully implemented. (See comment under §2.8).

19 Excessive overflow from barges during loading and transportation is discussed in this section only in regard to handling of unsuitable material. This is also of concern for suitable material. Seals on barge doors, and other management measures, must be a part of all dredging, transport, and disposal operations.

§4.2.7.3, *Mitigation Measures (Bay Farm Borrow Area)*

20 See comment regarding §3.2.4.3. The mitigation measures listed in this section may not be adequate to ensure that potentially significant impacts would not result from Confined Aquatic Disposal of contaminated sediments at the Bay Farm Borrow Area. Sufficient information is not yet available to determine

whether the site is appropriate for CAD, or the specific mitigation measures that may be necessary to make it so. In addition to the need to conduct a systematic site evaluation and selection process as described above, it is likely that substantial monitoring requirements would be applied to any such site in San Francisco Bay. This monitoring would entail both short term (construction phase) monitoring and long term monitoring (for cap integrity, contaminant isolation, organism exposure, etc.). This section should be expanded in the FSEIS to reflect these points.

§4.2.7.6 Groundwater Impacts (Galbraith)

On p. 4.2-51, the DSEIS states that lateral migration of slurry water through landfill materials may cause significant impacts. The following paragraph states that these impacts will be mitigated by installation of a containment system approved by the RWQCB but the system and its efficacy are not discussed. The FSEIS should describe the system in detail and disclose the extent this system can mitigate the significant impacts.

21

§4.3.4.1, Mitigation Measures (Ocean 102 Site)

This section should cite and analyze the relevant provisions of the proposed Site Management and Monitoring Plan for the deep ocean disposal site. The SMMP's provisions go beyond the mitigation measures listed in the DSEIS. Full compliance with the final SMMP will be a requirement for site use.

22

As stated in this section of the DSEIS, it may be possible to minimize the thickness of deposited sediments at the deep ocean site by moving the point of surface discharge from barge load to barge load, in order to spread material more thinly across the bottom. However, EPA would not necessarily endorse this practice for the Oakland project for several reasons. First, benthic impacts are fully expected to occur as a result of physical deposition of sediments at the site, and as determined in EPA's FEIS for designation of the site, these physical impacts do not represent a significant adverse effect as long as they remain within the boundaries of the disposal site. Thus the need for this "mitigation" measure is questionable. Second, it is more important from the perspective of site management and monitoring that disposed material remain within the site: discharge as suggested at various points within a "2 square kilometer radius circle" (sic) increases the possibility that some material could be deposited outside the site. (EPA's proposed surface target discharge zone is a circle approximately 1 kilometer in radius.) Third, when the probability of disposal events from other projects taking place at this multi-user disposal site is taken into account, the ultimate effectiveness of the measure is reduced. Before disposal occurs, specifics of the SMMP must have been worked out and finalized, and those specifics (including the dimensions of the surface discharge zone within the overall site) must be adhered to.

- 23 | Table 4.4.1.1-1, *Implementation Manual's Tiered Testing Approach*
(page 1 of 2)

The Interpretive Guideline for Tier III Benthos testing is slightly incorrect. The 20-percent-over-reference standard currently applies only to amphipods, and not to other bioassays.

- 24 | §4.4.1.3, *Differences between MPRSA Section 103 and Clean Water Act Section 404(b)(1)*

The discussion in this section should note that a national testing manual for Clean Water Act Section 404 testing is being prepared by EPA and the Corps, and will be released for public comment during the summer of 1994. This manual will be very similar to the MPRSA "Green Book", and as such will effectively eliminate many of the apparent differences between the programs in this regard.

§4.7.4.6 *Socioeconomic Impacts-Galbraith Golf Course*

- 25 | In keeping with Executive Order 12898 (E.O. 12898), **Federal Actions to Address Environmental Justice in Minority Populations and Low Income Populations**, the FSEIS should describe the measures taken by the Corps to: 1) fully analyze the environmental effects of the proposed Federal action on minority communities and low-income populations, and 2) describe how the Corps has presented opportunities for affected communities to provide input into the NEPA process. The intent and requirements of E.O. 12898 are clearly illustrated in the President's February 11, 1994 Memorandum for the Heads of all Departments and Agencies (attached).

- 26 | The Galbraith Golf Course is a facility where members of a minority community have the opportunity to provide interaction between seniors and youths. The DSEIS does not sufficiently describe the social and cultural impacts of closing the golf course down for 6 to 10 years on the community. The FSEIS should identify the social and environmental effects of the use of Galbraith Golf Course site on the minority community (see also above discussion regarding air quality, §4.1.4.6).

§4.9, *Human Health Risk Assessment*

- 27 | The draft Human Health Risk Assessment (HHRA) document referenced in this section was not available to EPA prior to completing our review of the DSEIS. We cannot comment specifically at this time regarding the adequacy of the HHRA in supporting the conclusions in the DSEIS. Please provide us with a copy of this document for review. Any changes to the document should be fully reflected in the FSEIS and the Record of Decision for the project.

§4.9.3.3, *Mitigation Measures (Galbraith Golf Course)*

- 28 | The HHRA identifies "placement of sufficient amounts of clean soil on top of the dredged sediment" as a way to reduce potential worst reasonable case impacts to a golf course
- ↓

maintenance worker. What may be "sufficient" is not discussed here. Elsewhere in the DSEIS (page 11 of the Corps responses to the U.S. Fish and Wildlife Service's draft Coordination Act Report for the Oakland project), a one-foot topsoil thickness is mentioned. However, at recent public meetings called to discuss the Galbreath Golf Course site, three to five feet of cover was discussed by the Port. The FSEIS should include more detail on the specific mitigation measures it discusses, as well as committing more directly to whether they will in fact be applied.

§4.9.4.3, Mitigation Measures (Port/Landfill)

A parenthetical statement appears in the middle of this, the final section of the DSEIS's summary of the HHRA, noting that the HHRA conclusions are not yet final and may change. This statement should appear at the beginning of Section 4.9. It is important that the FSEIS and Record of Decision for the project fully reflect the final HHRA, including any changes necessitated by review comments. In order to facilitate timely receipt of any review comments from EPA, please provide us with a copy of the draft HHRA document as soon as possible.

§6.0, Project Alternatives Analysis

The range of alternatives evaluated in detail in the DSEIS is appropriate. As mentioned above, however, the FSEIS should provide additional comparative analysis so that the reader can determine the general advantages and disadvantages of each alternative. The FSEIS should also point out limitations of certain alternative disposal sites such as Montezuma Wetlands and Leonard Ranch. The draft EIS for the Montezuma Wetlands project has not yet been released for public review, and it is unlikely that it could be available for any of the Oakland Deepening Project sediments. Similarly, a sediment rehandling facility at the Leonard Ranch site does not currently exist, nor is there a formal proposal for its construction. The current lack of capacity to dewater and rehandle dredged material destined for beneficial reuse, and for dredged material found to be unsuitable for unconfined aquatic disposal, remains a critical bottleneck in the ability to fully implement a comprehensive Long Term Management Strategy for the San Francisco Bay region. Nevertheless, we believe that development of such a regional rehandling facility should be fully evaluated via a separate EIS.

§6.1.1, Air Quality

We agree that channel deepening would result in a potential for reductions in air emissions on a per-unit-of-cargo basis. However, the summary discussion in this section of the DSEIS is somewhat misleading. Overall emissions may still increase over time due to the increase in total cargo volume that channel deepening will enable. The FSEIS should provide additional analysis or supporting information supporting the conclusion that there will be reductions in total emissions. The FSEIS should also identify and assess any other possible air quality impacts due to increases in cargo volume and related ship traffic.

34 | §6.1.4, *Biological Resources*

It is not necessarily true that impacts at the deep ocean disposal site would be substantially less under the no project alternative. The volume to be disposed at the ocean site under the selected alternative is only about one-third the yearly volume that could be accommodated at the site. Disposal from other projects would still be likely, even without the Oakland Deepening project sediments. Therefore, physical impacts to on-site benthic organisms would be expected to occur with or without the project.

35 | §6.2, *Comparison of Dredged Material Disposal Alternatives* (§4, *Biological Resources*)

The information currently available to EPA, and the information provided in the DSEIS, does not support the statement in this section that, "there are no significant impacts associated with ... the disposal of sediments at the (Bay Farm Borrow Area)." See comments above regarding §3.2.4.3 and §4.2.7.3. Since there is currently insufficient information for determining whether the Bay Farm Borrow Area is well suited for CAD, we cannot agree at this time that significant impacts could not occur. (This comment also applies to the relevant entry in Table 6-1, *Comparison of Dredged Material Disposal Sites*.)

Specific Comments on the Appendices to the DSEISAppendix A, *Sediment Characterization for Aquatic Disposal*

36 | ¶35. The "apparently, less stringent threshold" for significance in amphipod bioassays is not, as stated, to "compensate for the much higher sensitivity of amphipods to contaminants." Rather, it is to account for the degree of variability expected due to *non-contaminant related* effects when testing sediments that have a range of grain sizes, organic carbon contents, etc. Extensive experience with *Rhepoxinius abronius* and other amphipods has led to acceptance of the 20 percent mortality figure as an appropriate threshold which must be exceeded, compared to mortality in an appropriate reference sediment, before a test sediment may be considered as toxic.

37 | ¶36. This discussion correctly states that mortality in certain sediment samples was found to be due to ammonia toxicity, rather than to "chemicals of concern." However, readers are given no information about why ammonia itself is not considered a "contaminant of concern" for this project, nor why any indicated acute toxicity should not be grounds to define a sediment as unsuitable for unconfined aquatic disposal. This discussion in the FSEIS should be expanded to reflect the following: In this case, the ammonia levels found in the bioassay chambers would not be expected to persist in the environment upon or following disposal of the sediments at the ocean disposal site. The ammonia levels noted would be quickly - nearly instantaneously - stripped from the sediment upon exposure to the oxygenated water

column during the disposal event itself. In this sense, the ammonia encountered during these particular bioassays represented a "bioassay interference" rather than a potential for a significant impact from disposal, and were thus disregarded. Since the numerous other tests showed no other reason to believe that these particular sediments posed any potential for significant impacts, they were determined to be suitable for aquatic disposal.

¶41, (*Bioaccumulation*). This discussion is poorly worded. It is not necessarily true that bioaccumulation "is of no concern for human health ... or for ecological or biological reasons." We agree that bioaccumulation *per se* is often not tied to a specific ecological or biological endpoint. We also agree that the specific degree of bioaccumulation found in many of the sediment samples from the Oakland Deepening Project raises little or no direct concern of risk to human or environmental health. However, it should be clarified that bioaccumulation in the test species is viewed an indicator of potential bioavailability of sediment-borne contaminants to other species that may be exposed to the sediments at the disposal site.

¶42, (*Bioaccumulation*). Regarding FDA standards as a measure of the significance of the degree of bioaccumulation in a test species, it should be noted that "Green Book" tests apply these standards conservatively. This is because they are applied directly to the test species even though they are not direct human consumption species. This approach is conservative (i.e., more protective) for those compounds that do not actually biomagnify (most compounds in fact do not biomagnify).

¶45, (*Bioaccumulation*). We suggest rewording the second sentence as follows: "A magnitude of bioaccumulation no more than the variability of tissue concentrations observed to occur in wild-caught specimens exposed to appropriately clean reference sediments, kept under test conditions, is not considered to be significant."

¶69 (2), (*In-Bay Disposal Determinations*). Modify the final sentence to read: "...O-C4-B3 Special sediments were the apparent source ..."

Appendix E. 404(b)(1) Evaluation

§2.1.3 (*Dredged/Fill Material Movement*). Regarding the Sonoma Baylands site, the sentence, "Erosion and sedimentation will be minimized using topsoil to reestablish vegetation" presumably refers only to levees at the site. This should be clarified in the FSEIS.

Appendix H. U.S. Fish and Wildlife Service Draft Coordination Act Report (CAR)

- 43 | Corps response to CAR Oakland Harbor recommendation # 6. In response to the CAR recommendation for mitigation of loss of shallow water habitat due to deepening and widening the Oakland Harbor's channels, the Corps states, "The Corps has no specific guidance or experience in compensation for shallow subtidal impacts." We note that the Corps Port of Los Angeles/Port of Long Beach Deep Draft Navigation Improvements Project includes extensive replacement of shallow water (less than 20-feet deep) habitat that will be permanently lost due to both fill activities and channel creation/widening. In that case, a particular concern was replacement of foraging habitat for the endangered California least tern. However, the same shallow water habitat was considered to be substantially more important than deeper areas of the harbors from a fisheries perspective, as well. These considerations may apply to at least some degree to the Oakland Deepening Project as well and should be discussed more fully in the FSEIS. However, we also note that the compensatory measures recommended in the CAR will effectively be realized since construction of the Sonoma Baylands wetlands enhancement project is part of the alternative proposed to be implemented.
- 44 | Corps response to CAR Ocean Disposal Site recommendation # 1a. The CAR recommends compensatory mitigation be provided for impacts associated with use of EPA's proposed deep ocean disposal site. The Corps response to this recommendation appropriately defers consideration of this matter to EPA. Attached is a copy of EPA's detailed comments on the draft CAR (letter to the USFWS dated March 31, 1994). Those comments are provided so that the record on this issue will be complete in the FSEIS.
- 45 | Corps response to CAR Sonoma Baylands recommendation # 2. We understand that resolution has been reached since the DSEIS was published regarding the CAR recommendation that separate compensatory mitigation would be necessary for implementation of the Sonoma Baylands project. Because separate mitigation is no longer being recommended for this project, we anticipate that the final CAR, and the FSEIS discussion in this section, will be substantially changed. We therefore are not enclosing specific comments on this aspect of the draft CAR or the Corps responses.
- 46 | Corps response to CAR Galbraith Golf Course recommendation # 3b. A one foot soil thickness atop the deposited dredged material is mentioned here. However, at recent public meetings called to discuss the Galbraith Golf Course site, three to five feet of cover was discussed by the Port. See comment above regarding §4.9.3.3, *Mitigation Measures (Galbraith Golf Course)*. In order to assist the reader identify the ultimate impact, the FSEIS should provide more details on the specific mitigation measures and identify which measures will be implemented.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IX

75 Hawthorne Street
San Francisco, Ca. 94105-3901

MAR 3 1 1994

Dale A. Pierce
Acting Field Supervisor
U.S. Fish and Wildlife Service
2800 Cottage Way, Room 1803
Sacramento, California 95825-1846

**Subject: Revised Draft Fish and Wildlife Coordination Act Report
for the Oakland Harbor Navigation Project**

Dear Mr. Pierce:

EPA has reviewed the February 14, 1994 revised draft Fish and Wildlife Coordination Act Report (CAR) submitted to the Army Corp of Engineers by the U.S. Fish and Wildlife Service (FWS) for the Port of Oakland Deepening Project. The CAR provides FWS's draft conclusions about potential impacts associated with the various aspects of the Oakland project, and recommends mitigation measures for the impacts it concludes may occur. The Corps of Engineers and the Port of Oakland plan to dredge approximately 5.7 million cubic yards of sediment to deepen the Oakland harbor and berths to -42-feet. Disposal of the dredged material is proposed at a combination of four separate sites, as follows:

- 1) approximately 2.6 million cubic yards of the cleanest sediments would be used for wetlands restoration at the Sonoma Baylands site;
- 2) approximately 2 million cubic yards of non-toxic, ocean suitable sediments would be disposed at EPA's proposed deep ocean disposal site, 50 miles offshore of the Golden Gate in approximately 9,000 feet of water;
- 3) approximately 1 million cubic yards of dredged material determined by EPA to be unsuitable for ocean disposal would be placed in a confined disposal facility to be constructed at the existing Galbraith Golf Course site in Oakland; and
- 4) approximately 100,000 cubic yards of the most highly contaminated material, primarily from the vicinity of the proposed Inner Harbor turning circle, would be dewatered on Port property for later transport to an appropriate landfill.

Our general and specific comments which follow focus primarily on the CAR's ocean disposal discussions. Overall, we recommend that substantial corrections and revisions be made before the CAR is finalized

General Comments

Our principle concern with the CAR lies in its assumption that compensatory mitigation is needed for use of the proposed deep ocean dredged material disposal site (DODS), and its application of a Habitat Evaluation Procedure (HEP) model to calculate the degree of compensatory mitigation recommended. The DODS is proposed by EPA to be designated in approximately 9,000 feet of water, 50 miles offshore of the Golden Gate and 10 miles beyond the western boundary of the Gulf of the Farallones National Marine Sanctuary. Selection of this site was based on extensive field work, fully-coordinated with state and federal agencies, other interested parties, and the public through the Ocean Studies Work Group of the interagency Long Term Management Strategy (LTMS). This effort was comprehensively documented in EPA's August, 1993, *Final Environmental Impact Statement for Designation of a Deep Water Ocean Dredged Material Disposal Site off San Francisco, California* (site designation EIS).

As described in the site designation EIS, and as required by provisions of the Marine Protection, Research, and Sanctuaries Act (MPRSA) and EPA's ocean dumping criteria (40 CFR Part 227), dredged material may not be disposed in the ocean if it would cause a significant adverse impact to the marine environment. In order to determine whether dredged material is "suitable" for ocean disposal (i.e., should not cause any significant adverse impact), extensive physical, chemical, and biological testing is first required in accordance with national EPA/Corps of Engineers guidance (*Evaluation of Dredged Material Proposed for Ocean Disposal - Testing Manual*, February, 1991). The material proposed for ocean disposal from the Port of Oakland deepening project has indeed been determined by EPA to be suitable for such disposal; all "unsuitable" material will be disposed at appropriate confined locations.

In addition to the dredged material itself being non-toxic and in all other aspects suitable for ocean disposal, other potential impacts have been minimized by the disposal site selection process itself. The alternative deep ocean disposal sites that were considered in the site designation EIS were all areas where no significant impacts were expected other than physical impacts within the immediate disposal site. Nevertheless, the preferred alternative site which was identified, and which EPA has proposed for designation, has the least overall potential for impacts. The logic behind designating a disposal site off the continental shelf, in 9,000 ft of water 50 miles offshore, is to minimize the significance of all potential aquatic impacts, and to confine the inevitable physical impacts associated with disposal to an area both lacking significant fishery resources or unique ecological assemblages, and having the ability to recover from short-term changes brought about by the addition of sediment. We note that physical impacts (i.e. smothering) are not necessarily equivalent to impacts due to acute or chronic toxicity. This is because smothering of benthos at the disposal site would neither render the area uncolonizable in the future nor would it constitute a permanent change in the type of habitat existing at the site (e.g., it is not the same as permanently changing a wetland into an upland, or a seasonal wetland into a tidal wetland).

Since the ocean disposal site has been selected specifically to minimize any on-site or off-site impacts due to disposal of dredged material, since only suitable non-toxic sediments may be disposed at the site, and since deposited sediments at the site will not alter its basic habitat type, we strongly disagree that any compensatory mitigation for use of the site is necessary or reasonable

We also question the validity of applying a HEP model for quantifying potential impacts due to ocean disposal. As the CAR itself states (page 109), "HEP applications, with appropriate Habitat Suitability Indexes (HSIs) have not previously been used for such assessments for offshore coastal habitats (i.e., open water, deep water column, and deep water benthos)." Even if questions about how to best apply a HEP model in this situation could be addressed, the analysis in the CAR is substantially flawed mechanistically. In our specific comments below, we note numerous errors in the model's calculations, as well as what we believe to be erroneous assumptions behind many of the calculations (including some assumptions about what may constitute an "impact"). All of these have resulted in very large overestimates of the potential effects of ocean disposal.

Specific Comments

1. There are numerous points in the Ocean Disposal Site section of the CAR where information from EPA's site designation EIS has been incorrectly quoted, calculated, or otherwise used:

- a. Calculation of the impacted area for the "open ocean" (surface to -50 feet): Contrary to the site summary information provided in the CAR (page 107), the dimensions of Alternative Site 5 are described on page S-3 of the EIS as 4 miles by 2.5 miles (8.5 square miles), ranging from 8,200 to 9,800 feet in depth, located 50 nautical miles west of the Golden Gate and 10 nautical miles west of the boundary of the Gulf of the Farallones National Marine Sanctuary.

The CAR incorrectly estimates the dimensions of the ocean site to be 13 square miles (rather than 8.5 square miles as presented in the EIS). It then converts the incorrect 13 square mile figure to 8,400 acres (actual conversion is to 8,320 acres), and uses this figure in Table 5 for the calculation of the AAHU under "with dumping" and "without dumping" scenarios. The actual site dimension of 8.5 square miles equates to 5,440 acres.

- b. Calculation of the impacted area for the "deep water column" (below -50 feet): The results of the model studies presented in Table 4.2-3 of the site designation EIS are not accurately reflected in the CAR. The areal extent of a plume (of 1 mg/l or greater) predicted by the model ranges from 8.9 square miles for clay-silt clumps to 1,421 square miles for unclumped clay-silt dredged material. The CAR assumes an area of 578 square miles of water column habitat to be affected by dumping what it considers to be a representative load composed of very fine sand. Use of this number is incorrect for two reasons. First, an accurate conversion from the site designation EIS table gives an "affected" acreage of 360 square miles rather than 578 square mi. Second, the site designation EIS defines an "affected area" as corresponding to the area within the 1 mg/l suspended particulate contour, a concentration which is equivalent to an assumed background concentration (p. 4.21). The presence of background concentrations of suspended particulates in the water column does not represent a reasonable definition of "impact" from disposed material. Modeling results presented in the site designation EIS indicate that suspended sediment concentrations greater than 10 mg/l are not expected outside the immediate disposal site (p. 4-23). Also, no water quality standards will be violated outside the boundaries of the site. Therefore, any potential water quality "impacts" will be transient and should be limited to the 8.5 square mile disposal site (p 4-37).

- c. Calculation of the impacted area for the "deep water benthos": The CAR's calculation of the impacted area for the deep water benthos reflects both a miscalculation of the dimensions of impacted deep water benthos and a misunderstanding of the model results for maximum deposit thickness. According to the modeling results presented in Table 4.2-4 of the site designation EIS, the total predicted areal coverage of dredged material dumped at the site would range from 108 square mi to 173 square mi. Thus, the largest area used in the CAR's AAHU calculations should be 173 square miles rather than 278 square miles. Furthermore, the mean deposit thickness associated with this larger area is less than 1 cm. Generally, instantaneous deposit thickness in excess of 10 cm may be expected to cause significant direct impacts (i.e. smothering) to benthic organisms (site designation EIS p. 4-43). While the maximum deposit thicknesses presented in Table 4.2-4 are well in excess of 10 cm, these represent cumulative deposition of material over one year. For example, a maximum yearly deposit thickness of 49.3 cm would be equivalent to an daily average maximum thickness of 0.14 cm, which many infaunal organisms may be expected survive without effect.

Assuming that the "impact area" is equivalent to the acreage where cumulative deposit thicknesses over a year are 10 cm or greater, "impacts" would be confined to the immediate disposal site: less than 8.5 square miles, as opposed to 278 square miles. In fact, most of the area that would accumulate even 1 cm in a year would remain confined within the immediate disposal site boundaries (site designation EIS fig. 4.2-7). Again, note that this potential "impact" is physical (e.g. smothering) and is not necessarily equivalent to impacts due to acute or chronic toxicity. This is because smothering of benthos within the disposal site would neither render the area uncolonizable in the future nor would it constitute a permanent change in the type of habitat existing at the site (e.g., it is not the same as permanently changing a wetland into an upland, or a seasonal wetland into a tidal wetland).

- d. Recalculation of AAHUs based on corrected acreages: Substituting the boundaries of the disposal site (8.5 square miles or 5,440 acres) as the area of potential "impact" for the open ocean, deep water column, and the deep water benthos in Table 5 of the CAR, the calculated total AAHU for the "without dumping" scenario is reduced from 157.7 to 27.6. Likewise, the total AAHU calculated for the "with dumping" scenario is reduced from 98.1 to 11.9. The recalculated potential losses in AAHUs due to disposal at the site, based solely on use of these corrected acreages, would be significantly lower than those originally derived by the CAR: only 15.7 as opposed to 59.6. (Changes to other parameters used in the CAR's AAHU calculations would still further reduce any calculated "loss" of habitat value - see comment 2, below.)

2. In our review of the CAR, we found several cases in which the difference between "with disposal" and "without disposal" habitat suitability indices do not appear to reflect a realistic estimation of potential impacts associated with disposal of suitable dredged material at the ocean site. Two examples are discussed here:

- a. The difference between the CAR's no-project (0.6) and with-project (0.2) suitability indices for overall community diversity in open surface waters apparently reflects an assumption that increased frequency of ship traffic associated with dredged material disposal would decrease overall habitat value to birds and mammals by two thirds. The CAR assumes 2,000 dumping events per year (averaging 7 events per day), and concludes that this "high" frequency of use

would likely result in a "learned avoidance" of the surface waters by birds and marine mammals. However, the site designation EIS (p. 4-14) estimated that dredged material disposal at the ocean site would result in 730 additional vessel transits as opposed to 2,000 (averaging approximately 2 transits per day, or approximately one-third the frequency assumed in the CAR). Compared to the total shipping activity in the area, this additional traffic is considered to be "negligible" by the U.S. Coast Guard. We would not expect an increase of 730 vessel transits per year to result in a greater than 60% decline in habitat value. Based on our experience with disposal operations around the country, it may be just as likely that impacts associated with the transport and dumping of dredged material on surface-associated birds would be positive: a "learned attraction" to the increased foraging potential offered by infaunal organisms in the dredged material entrained in the (temporary) surface plume during a dumping episode may result in an increase rather than decrease in use of the disposal site itself by surface-feeding birds.

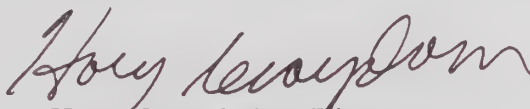
- b. Likewise, the absolute values assigned to various community-based suitability indices appear to have little relationship to reality. For example, for deep water benthos, the CAR set the suitability index value to 0.001 to reflect an assumption of the relative scarcity of this habitat type on a regional basis. We question the validity of this assumption and the value used, since it is highly unlikely that the area of benthos potentially affected at the site represents one thousandth of the total deep water benthic habitat in the region.
3. The CAR expresses concerns that the calculation of the limiting permissible concentration (LPC) from suspended phase toxicity tests may underestimate the impacts caused by multiple exposures of water column organisms to dredged material disposed at aquatic disposal sites. The CAR assumption is that the suspended phase tests do not represent a realistic exposure regime. Quite to the contrary, we feel that the LPC calculation provides a conservative threshold for effect and is, if anything, generally an overestimation of the possibility for effects in the water column. Among the reasons for this are:
- a. The EC50/LC50 values used in derivation of the LPC are determined using suspended particulate phase tests where exposures are to continuous concentrations that last a full 96 hours, as compared to the more realistic exposure times for sensitive water column organisms, measured in minutes to a few hours, that would result from discrete disposal events.
 - b. The LPC calculation incorporates various assumptions which add to the conservatism of the threshold. Typically, the lower EC50 (abnormality endpoint) values, rather than LC50 (lethality endpoint) values, are used. The LPC is, itself, then defined as 1 percent of the EC50 concentration.
 - c. The possibility for multiple dumps resulting in a cumulative exceedence of the LPC is very low. Even the CAR's assumed disposal frequency of up to 7 barge loads per day would not result in a substantial overlap of exposures, particularly not in the same water mass. Therefore, multiple exposures of the same group of organisms to numerous dumping events would not be expected to occur regularly or often.

4. The CAR refers to the possibility for chronic toxic effects occurring at the DODS over the life of the Oakland project. EPA would like to emphasize that the determination of ocean suitability for dredged material is based on a consideration of several different criteria including toxicology/chemistry, physical impacts, and the availability of alternative disposal options. In addition, the DODS will be subject to a detailed site management and monitoring plan (SMMP). The SMMP was summarized in EPA's ocean site designation Proposed Rule, published in the Federal Register on February 18, 1994. The full proposed SMMP will be issued by EPA for public comment as a public notice in the coming days. The SMMP provides for sampling and monitoring of the benthos surrounding the DODS, to determine whether significant impacts, including impacts due to chronic toxicity, may be occurring. If significant impacts are identified, changes to site management will be triggered. These changes may range from relatively minor adjustments in site use requirements to cessation of all disposal activities. In this regard, site management is already geared to both identify and, if necessary "mitigate" any significant impacts.

In summary, the proposed deep ocean disposal site has been specifically selected, and will be managed, so as to avoid any significant adverse impacts to the marine environment. EPA therefore strongly disagrees that compensatory mitigation for disposal of suitable, non-toxic dredged material there is necessary or appropriate. We recommend that the CAR be revised in this regard, and that its assumptions and calculations be carefully reevaluated based on our specific comments, before it is finalized.

Thank you for the opportunity to review the revised draft Coordination Act Report for the Oakland Harbor Navigation Project. We are available to work with your staff as the report is finalized. Please call me at (415) 744-2125 if you would like to discuss EPA's comments and recommendations, or have your staff contact Brian Ross at (415) 744-1987.

Sincerely,



Harry Seraydarian, Director
Water Management Division

cc: Corps of Engineers (Cardoza)
National Marine Fisheries Service (Bybee)
Resources Agency (Wheeler)
Regional Water Quality Control Board (Ritchie)
Bay Conservation and Development Commission (Pendleton)
California Coastal Commission (Raives)
California Coastal Conservancy (Fisher)
California Department of Fish and Game (Tasto)
Port of Oakland (McGrath)



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 9

75 Hawthorne Street
San Francisco, CA 94105-3901

April 7, 1994

MEMORANDUM

SUBJECT: Environmental Justice

FROM: Dave Farrel (E-3-1)

TO: David Tomsovic
Carolyn Yale
Jeannie Geselbracht
Laura Fujii
Edward Yates
Jeff Philliber
Kathryn Mazaika (A-2-1)

Reviewers should immediately begin incorporating the following statement (or a derivative thereof) into their scoping comments. A copy of the referenced Presidential Memo should also be attached.

"In keeping with Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations (EO 12898), the DEIS should describe the measures taken by the _____ to: 1) fully analyze the environmental effects of the proposed Federal action on minority communities and low-income populations, and 2) present opportunities for affected communities to provide input into the NEPA process. The intent and requirements of EO 12898 are clearly illustrated in the President's February 11, 1994 Memorandum for the Heads of all Departments and Agencies, attached."

Reviews of NEPA documents prepared subsequent to the NOI should comment on whether the EIS has appropriately addressed issues related to environmental justice, if applicable. I suggest that if you have doubts about whether an agency has met the intent of EO 12898 and the Presidential Memo, you discuss the issue(s) with Lori Lewis.

THE WHITE HOUSE

WASHINGTON

February 11, 1994

MEMORANDUM FOR THE HEADS OF ALL DEPARTMENTS AND AGENCIES

SUBJECT: Executive Order on Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations

Today I have issued an Executive order on Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations. That order is designed to focus Federal attention on the environmental and human health conditions in minority communities and low-income communities with the goal of achieving environmental justice. That order is also intended to promote nondiscrimination in Federal programs substantially affecting human health and the environment, and to provide minority communities and low-income communities access to public information on, and an opportunity for public participation in, matters relating to human health or the environment.

The purpose of this separate memorandum is to underscore certain provision of existing law that can help ensure that all communities and persons across this Nation live in a safe and healthful environment. Environmental and civil rights statutes provide many opportunities to address environmental hazards in minority communities and low-income communities. Application of these existing statutory provisions is an important part of this Administration's efforts to prevent those minority communities and low-income communities from being subject to disproportionately high and adverse environmental effects.

I am therefore today directing that all department and agency heads take appropriate and necessary steps to ensure that the following specific directives are implemented immediately:

In accordance with Title VI of the Civil Rights Act of 1964, each Federal agency shall ensure that all programs or activities receiving Federal financial assistance that affect human health or the environment do not directly, or through contractual or other arrangements, use criteria, methods, or practices that discriminate on the basis of race, color, or national origin.

Each Federal agency shall analyze the environmental effects, including human health, economic and social effects, of Federal actions, including effects on minority communities and low-income communities, when such analysis is required by the National Environmental Policy Act of 1969 (NEPA), 42 U.S.C. section 4321 et seq. Mitigation measures outlined or analyzed in an environmental assessment, environmental impact statement, or record of decision, whenever feasible, should address significant and adverse environmental effects of proposed Federal actions on minority communities and low-income communities.

Each Federal agency shall provide opportunities for community input in the NEPA process, including identifying potential effects and mitigation measures in consultation with affected communities and improving the accessibility of meetings, crucial documents, and notices.

The Environmental Protection Agency, when reviewing environmental effects of proposed action of other Federal agencies under section 309 of the Clean Air Act, 42 U.S.C. section 7609, shall ensure that the involved agency has fully analyzed environmental effects on minority communities and low-income communities, including human health, social, and economic effects.

Each Federal agency shall ensure that the public, including minority communities and low-income communities, has adequate access to public information relating to human health or environmental planning, regulations, and enforcement when required under the Freedom of Information Act, 5 U.S.C. section 552, the Sunshine Act, 5 U.S.C. section 552b, and the Emergency Planning and Community Right-to-Know Act, 42 U.S.C. section 11044.

* * *

This memorandum is intended only to improve the internal management of the Executive Branch and is not intended to, nor does it create, any right, benefit, or trust responsibility, substantive or procedural, enforceable at law or equity by a party against the United States, its agencies, its officers, or any person.

William D. Clement

ENVIRONMENTAL JUSTICE
EXECUTIVE ORDER
3195-01-P
12898

FEDERAL ACTIONS TO ADDRESS ENVIRONMENTAL JUSTICE
IN MINORITY POPULATIONS AND LOW-INCOME POPULATIONS

By the authority vested in me as President by the Constitution and the laws of the United States of America, it is hereby ordered as follows:

Section 1-1. Implementation.

1-101. Agency Responsibilities. To the greatest extent practicable and permitted by law, and consistent with the principles set forth in the report on the National Performance Review, each Federal agency shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations in the United States and its territories and possessions, the District of Columbia, the Commonwealth of Puerto Rico, and the Commonwealth of the Mariana Islands.

1-102. Creation of an Interagency Working Group on Environmental Justice. (a) Within 3 months of the date of this order, the Administrator of the Environmental Protection Agency ("Administrator") or the Administrator's designee shall convene an interagency Federal Working Group on Environmental Justice ("Working Group"). The Working Group shall comprise the heads of the following executive agencies and offices, or their designees: (a) Department of Defense; (b) Department of Health and Human Services; (c) Department of Housing and Urban Development; (d) Department of Labor; (e) Department of Agriculture; (f) Department of Transportation; (g) Department of Justice; (h) Department of the Interior; (i) Department of Commerce; (j) Department of Energy; (k) Environmental Protection Agency; (l) Office of Management and Budget; (m) Office of Science and Technology Policy; (n) Office of the Deputy Assistant to the President for Environmental Policy;

(o) Office of the Assistant to the President for Domestic Policy; (p) National Economic Council; (q) Council of Economic Advisers; and (r) such other Government officials as the President may designate. The Working Group shall report to the President through the Deputy Assistant to the President for Environmental Policy and the Assistant to the President for Domestic Policy.

(b) The Working Group shall: (1) provide guidance to Federal agencies on criteria for identifying disproportionately high and adverse human health or environmental effects on minority populations and low-income populations;

(2) coordinate with, provide guidance to, and serve as a clearinghouse for, each Federal agency as it develops an environmental justice strategy as required by section 1-103 of this order, in order to ensure that the administration, interpretation and enforcement of programs, activities and policies are undertaken in a consistent manner;

(3) assist in coordinating research by, and stimulating cooperation among, the Environmental Protection Agency, the Department of Health and Human Services, the Department of Housing and Urban Development, and other agencies conducting research or other activities in accordance with section 3-3 of this order;

(4) assist in coordinating data collection, required by this order;

(5) examine existing data and studies on environmental justice;

(6) hold public meetings as required in section 5-502 of this order; and

(7) develop interagency model projects on environmental justice that evidence cooperation among Federal agencies.

1-103. Development of Agency Strategies. (a) Except as provided in section 6-605 of this order, each Federal agency shall develop an agency-wide environmental justice strategy, as set forth in subsections (b)-(e) of this section that identifies and addresses disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations. The environmental justice strategy shall list programs, policies, planning and public participation processes, enforcement, and/or rulemakings related to human health or the environment that should be revised to, at a minimum:

- (1) promote enforcement of all health and environmental statutes in areas with minority populations and low-income populations;
- (2) ensure greater public participation;
- (3) improve research and data collection relating to the health of and environment of minority populations and low-income populations; and

(4) identify differential patterns of consumption of natural resources among minority populations and low-income populations. In addition, the environmental justice strategy shall include, where appropriate, a timetable for undertaking identified revisions and consideration of economic and social implications of the revisions.

(b) Within 4 months of the date of this order, each Federal agency shall identify an internal administrative process for developing its environmental justice strategy, and shall inform the Working Group of the process.

(c) Within 6 months of the date of this order, each Federal agency shall provide the Working Group with an outline of its proposed environmental justice strategy.

(d) Within 10 months of the date of this order, each Federal agency shall provide the Working Group with its proposed environmental justice strategy.

(e) Within 12 months of the date of this order, each Federal agency shall finalize its environmental justice strategy and provide a copy and written description of its strategy to the Working Group. During the 12 month period from the date of this order, each Federal agency, as part of its environmental justice strategy, shall identify several specific projects that can be promptly undertaken to address particular concerns identified during the development of the proposed environmental justice strategy, and a schedule for implementing those projects.

(f) Within 24 months of the date of this order, each Federal agency shall report to the Working Group on its progress in implementing its agency-wide environmental justice strategy.

(g) Federal agencies shall provide additional periodic reports to the Working Group as requested by the Working Group.

1-104. Reports to the President. Within 14 months of the date of this order, the Working Group shall submit to the President, through the Office of the Deputy Assistant to the President for Environmental Policy and the Office of the Assistant to the President for Domestic Policy, a report that describes the implementation of this order, and includes the final environmental justice strategies described in section 1-103(e) of this order.

Sec. 2-2. Federal Agency Responsibilities for Federal Programs. Each Federal agency shall conduct its programs, policies, and activities that substantially affect human health or the environment, in a manner that ensures that such programs, policies, and activities do not have the effect of excluding persons (including populations) from participation in, denying persons (including populations) the benefits of, or subjecting persons (including populations) to discrimination under, such programs, policies, and activities, because of their race, color, or national origin.

Sec. 3-3. Research, Data Collection, and Analysis.

3-301. Human Health and Environmental Research and Analysis. (a) Environmental human health research, whenever practicable and appropriate, shall include diverse segments of the population in epidemiological and clinical studies, including segments at high risk from environmental hazards, such as minority populations, low-income populations and workers who may be exposed to substantial environmental hazards.

(b) Environmental human health analyses, whenever practicable and appropriate, shall identify multiple and cumulative exposures.

(c) Federal agencies shall provide minority populations and low-income populations the opportunity to comment on the development and design of research strategies undertaken pursuant to this order.

3-302. Human Health and Environmental Data Collection and Analysis. To the extent permitted by existing law, including the Privacy Act, as amended (5 U.S.C. section 552a): (a) each Federal agency, whenever practicable and appropriate, shall collect, maintain, and analyze information assessing and comparing environmental and human health risks borne by populations identified by race, national origin, or income. To the extent practical and appropriate, Federal agencies shall use this information to determine whether their programs, policies, and activities have disproportionately high and adverse human health or environmental effects on minority populations and low-income populations;

(b) In connection with the development and implementation of agency strategies in section 1-103 of this order, each Federal agency, whenever practicable and appropriate, shall collect, maintain and analyze information on the race, national origin, income level, and other readily accessible and appropriate information for areas surrounding facilities or

sites expected to have a substantial environmental, human health, or economic effect on the surrounding populations, when such facilities or sites become the subject of a substantial Federal environmental administrative or judicial action. Such information shall be made available to the public, unless prohibited by law; and

(c) Each Federal agency, whenever practicable and appropriate, shall collect, maintain, and analyze information on the race, national origin, income level, and other readily accessible and appropriate information for areas surrounding Federal facilities that are: (1) subject to the reporting requirements under the Emergency Planning and Community Right-to-Know Act, 42 U.S.C. section 11001-11050 as mandated in Executive Order No. 12856; and (2) expected to have a substantial environmental, human health, or economic effect on surrounding populations. Such information shall be made available to the public, unless prohibited by law.

(d) In carrying out the responsibilities in this section, each Federal agency, whenever practicable and appropriate, shall share information and eliminate unnecessary duplication of efforts through the use of existing data systems and cooperative agreements among Federal agencies and with State, local, and tribal governments.

Sec. 4-4. Subsistence Consumption of Fish and Wildlife.

4-401. Consumption Patterns. In order to assist in identifying the need for ensuring protection of populations with differential patterns of subsistence consumption of fish and wildlife, Federal agencies, whenever practicable and appropriate, shall collect, maintain, and analyze information on the consumption patterns of populations who principally rely on fish and/or wildlife for subsistence. Federal agencies shall communicate to the public the risks of those consumption patterns.

4-402. Guidance. Federal agencies, whenever practicable and appropriate, shall work in a coordinated manner to publish guidance reflecting the latest scientific information available concerning methods for evaluating the human health risks associated with the consumption of pollutant-bearing fish or wildlife. Agencies shall consider such guidance in developing their policies and rules.

Sec. 5-5. Public Participation and Access to Information.

(a) The public may submit recommendations to Federal agencies relating to the incorporation of environmental justice principles into Federal agency programs or policies. Each Federal agency shall convey such recommendations to the Working Group.

(b) Each Federal agency may, whenever practicable and appropriate, translate crucial public documents, notices, and hearings relating to human health or the environment for limited English speaking populations.

(c) Each Federal agency shall work to ensure that public documents, notices, and hearings relating to human health or the environment are concise, understandable, and readily accessible to the public.

(d) The Working Group shall hold public meetings, as appropriate, for the purpose of fact-finding, receiving public comments, and conducting inquiries concerning environmental justice. The Working Group shall prepare for public review a summary of the comments and recommendations discussed at the public meetings.

Sec. 6-6. General Provisions.

6-601. Responsibility for Agency Implementation. The head of each Federal agency shall be responsible for ensuring compliance with this order. Each Federal agency shall conduct internal reviews and take such other steps as may be necessary to monitor compliance with this order.

6-602. Executive Order No. 12250. This Executive order is intended to supplement but not supersede Executive Order No. 12250, which requires consistent and effective implementation of various laws prohibiting discriminatory practices in programs receiving Federal financial assistance. Nothing herein shall limit the effect or mandate of Executive Order No. 12250.

6-603. Executive Order No. 12875. This Executive order is not intended to limit the effect or mandate of Executive Order No. 12875.

6-604. Scope. For purposes of this order, Federal agency means any agency on the Working Group, and such other agencies as may be designated by the President, that conducts any Federal program or activity that substantially affects human health or the environment. Independent agencies are requested to comply with the provisions of this order.

6-605. Petitions for Exemptions. The head of a Federal agency may petition the President for an exemption from the requirements of this order on the grounds that all or some of the petitioning agency's programs or activities should not be subject to the requirements of this order.

6-606. Native American Programs. Each Federal agency responsibility set forth under this order shall apply equally to Native American programs. In addition, the Department of the Interior, in coordination with the Working Group, and, after consultation with tribal leaders, shall coordinate steps taken pursuant to this order that address Federally-recognized Indian Tribes.

6-607. Costs. Unless otherwise provided by law, Federal agencies shall assume the financial costs of complying with this order.

6-608. General. Federal agencies shall implement this order consistent with, and to the extent permitted by, existing law.

6-609. Judicial Review. This order is intended only to improve the internal management of the executive branch and is not intended to, nor does it create any right, benefit, or trust responsibility, substantive or procedural, enforceable at law or equity by a party against the United States, its agencies, its officers, or any person. This order shall not be construed to create any right to judicial review involving the compliance or noncompliance of the United States, its agencies, its officers, or any other person with this order.

William D. Clinton

THE WHITE HOUSE,

February 11, 1994.


Carolyn W. Hall

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UNITED STATES DEPARTMENT OF COMMERCE
Office of the Under Secretary for
Oceans and Atmosphere
Washington, D.C. 20230

May 5, 1994

Mr. Roger Golden
Corps of Engineers
211 Main Street
San Francisco, California 94105

Dear Mr. Golden:

Enclosed are comments on the Draft Environmental Impact
Statement for the Oakland Harbor Deep-Draft Navigation
Improvements, California

Thank you for giving us an opportunity to review the
document.

Sincerely,

Donna S. Wieting
Acting Director
Ecology and Conservation Office

Enclosure





UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE

Southwest Region
501 West Ocean Boulevard, Suite 4200
Long Beach, California 90802-4213
TEL (310) 980-4000; FAX (310) 980-4018

April 20, 1994

F/SW022:DBM

MEMORANDUM FOR: Donna S. Wieting
Acting Director, Ecology and Conservation
Office

FROM: *Rodney R. Matlock*
for Gary Matlock
Acting Regional Director

SUBJECT: Draft Supplemental Environmental Impact
Report/Environmental Impact Statement Oakland
Harbor Deep-Draft Navigation Improvements
(DEIS 9403-03)

The National Marine Fisheries Service (NMFS) has reviewed the draft supplemental Environmental Impact Report/Environmental Impact Statement for Oakland Harbor Deep-Draft Navigation Improvements and we concur with the conclusions and support the recommended Alternative B2. Alternative B2 proposes disposal of 1.8 million cubic yards (mcy) of appropriate dredged material at the Ocean Section 102 Site, 2.6 mcy at Sonoma Baylands, 1.3 mcy at Galbraith Golf Course, and up to 100,000 cy at the Port of Oakland 9th Avenue Terminal/Landfill site.

NMFS concurs that Alternative B2 is the environmentally preferred alternative. The use of appropriate dredged material to restore 297 acres of tidal marsh at Sonoma Baylands will result in a substantial increase in wetland habitat of national importance. This project is a major contribution to the long-term dredged material disposal program for San Francisco Bay. It demonstrates a beneficial use for dredged material, the cost effectiveness of ocean disposal, and a selection of multiple disposal alternatives. This effort will contribute and encourage further actions to restore fisheries in the Bay.

If you have questions concerning these comments, please contact Lieutenant (jg) Dante Maragni at: 777 Sonoma Avenue, Room 325, Santa Rosa, California 95404; telephone 707-578-7513.





UNITED STATES DEPARTMENT OF COMMERCE
Office of the Under Secretary for
Oceans and Atmosphere
Washington, D.C. 20230

May 18, 1994

Mr. Roger Golden
Corps of Engineers
211 Main Street
San Francisco, California 94105

Dear Mr. Golden:

Enclosed are additional comments on the Draft Environmental
Impact Statement for the Oakland Harbor Deep-Draft Navigation
Improvements, California

Thank you for giving us an opportunity to review the
document.

Sincerely,

Donna S. Wieting
Acting Director
Ecology and Conservation Office

Enclosure





UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL OCEAN SERVICE
Coast and Geodetic Survey
Silver Spring, Maryland 20910

APR 22 1994

MEMORANDUM FOR: Donna Wieting, Acting Chief
Ecology and Environmental Conservation Office
Office of the Chief Scientist

FROM: *Donald A. Yeager*
Rear Admiral J. Austin Yeager, NOAA
Director, Coast and Geodetic Survey

SUBJECT: DEIS 9403.03 - Oakland Harbor Deep Draft
Navigation Improvements, California

The text of this report indicates that the proposed dredging operations to deepen the Federally maintained navigation channel in Oakland Harbor, California, to 42 feet will affect the charted channel tabulations on National Ocean Service (NOS) harbor charts 18649 and 18650, and small craft chart 18652. The text of Chapter 7 of the NOS U.S. Coast Pilot 7, which references the maintained project depths for this channel, also will be affected. The outer harbor project depth is now 35 feet and the inner harbor project depth is now 38 feet. The entrance channel and existing turning basin in the outer harbor will be widened and a new turning basin will be created in the inner harbor. Two piers in the inner harbor will be partially removed and a Navy sewer line will be relocated.

This project is being undertaken in the economic interest of the Port of Oakland and in the interest of navigational safety. The proposed action is planned in an effort to eliminate costly delays to vessel traffic caused by daily low tides and the increase in operating drafts of vessels calling at the port.

Since the proposed project will occur in an already Federally maintained channel subjected to periodic dredging, the project's objectives apparently can be met with little aquatic area impact. The plans for disposal of the dredged material involve two existing disposal areas and the Bay Farm Borrow Area which are shown on existing NOS charts.

NOS would like to receive after-completion dredging project blueprints of the harbor entrance and inner channels in order to accurately detail seafloor changes on future editions of nautical charts 18649, 18650, 18652, and U.S. Coast Pilot 7. After-completion surveys of the disposal sites may also be necessary depending upon the expected rate of dispersal of the dredged materials.

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1 ↑ After-completion surveys of the Bay Farm Borrow Area should also be provided, as should blueprints detailing relocation of the Navy sewer line and inner harbor pier removals. These final blueprints and surveys should be sent directly to the Nautical Data Section, N/CG221, SSMC3, station 7317, Nautical Charting Division, NOAA, Silver Spring, Maryland 20910-3282. All changes resulting from this project will be reflected on the three nautical charts and Coast Pilot affected by the proposed project.

For further information concerning this response, please contact the External and Cooperative Affairs Group, N/CG22x2, SSMC3, station 7458, Nautical Charting Division, NOAA, Silver Spring, Maryland 20910-3282, telephone 301-713-2729.

cc: N/CG1x9 - J. D. D'Onofrio
N/CG17 - J. Spencer
N/CG22x2 - H. Danley

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SAN FRANCISCO BAY CONSERVATION AND DEVELOPMENT COMMISSION

THIRTY VAN NESS AVENUE, SUITE 2011
SAN FRANCISCO, CALIFORNIA 94102-6080
PHONE: (415) 557-3686

May 2, 1994

Mr. Roger Golden
U.S. Army Corps of Engineers
211 Main Street
San Francisco, California 94102

**SUBJECT: Draft Supplemental Environmental Impact Report/Statement
for Oakland Harbor Deep-Draft Navigation Improvements;
Inquiry File No. MC.MC.7309.1; Planning File: Bay Dredging
Management, Port of Oakland -42' Deepening**

Dear Mr. Golden:

This letter transmits the San Francisco Bay Conservation and Development Commission (Commission) staff comments regarding the *Draft Supplemental Environmental Impact Report/Statement* (DSEIR/S) for the navigation improvement project at the Oakland Outer and Inner Harbor.

1 | According to the DSEIR/S, the navigation improvement project would involve: (1) navigation channel deepening to -42 feet mean lower low water (MLLW) at the Inner and Outer Harbors; (2) deepening and enlarging 3.4 miles of the Outer Harbor, and 4.0 miles of the Inner Harbor; (3) widening the Inner Harbor's Entrance channel and upper reach, and an existing turning area in the Outer Harbor; (4) constructing a new turning basin in the Inner Harbor, (5) deepening Inner and Outer Harbor vessel berths to -42 feet MLLW; (6) relocating existing submarine utilities; and (7) removing existing pier structures. In addition, the project would involve disposal of up to 5.8 million cubic yards (mcy) of dredged material. The Commission previously granted Permit No. 4-88 to the Port of Oakland and Consistency Determination No. 12-87 to the U.S. Army Corps of Engineers (Corps) for deepening the Port's Inner and Outer Harbor Channel up to -42 feet MLLW, and disposing the dredged material outside the Commission's jurisdiction. As you know, the work authorized by the above-referenced permit and consistency determination was not completed, and this authorization has since expired. In June 1992, the Commission concurred with Consistency Determination No. 3-92 which authorized deepening of the Port's Inner and Outer Harbor to -38 feet MLLW and disposing the majority of the dredged material at the main in-Bay disposal site near Alcatraz Island.

The DSEIR/S discusses a variety of potential disposal options for the 5.8 mcy of dredged material, and identifies "Alternative B2" as the environmentally preferred and feasible alternative for the material. Alternative B2 would involve disposing: up to 1.8 mcy of material at the ocean site (slated for designation by the U.S. Environmental Protection Agency (U.S. EPA) in June 1994); up to 2.6 mcy of material at the 309-acre portion of the Sonoma Baylands wetland restoration site (Sonoma County); up to 1.3 mcy of material at Galbraith Golf Course (Alameda County); and, if deemed necessary by the San Francisco Regional Water Quality Control Board (Regional Board), up to 100,000 cy of material at the Port of Oakland's Ninth Avenue Terminal for rehandling, and at West Contra Costa Landfill (in Richmond), Vasco Road Landfill (in Livermore), or East Carbon Development Corporation Landfill (in Carbon County, Utah) for permanent containment.

As you are likely aware, we have previously commented on environmental documents regarding the proposed project on February 14, 1984, May 22, 1987, November 16, 1987, December 14, 1987, and April 21, 1992 to the Corps, and on September 7, 1998, July 11, 1990, January 25, 1991 and July 19, 1993 to the Port of Oakland. Our Commission has not reviewed the DSEIR/S. Commission staff, however, has reviewed the document and is submitting its comments based on the federal Coastal Zone Management Act (CZMA), the Commission's federally-approved management plan for San Francisco Bay, McAteer-Petris Act, and the Commission's *San Francisco Bay Plan* (Bay Plan).

2 | In summary, Commission staff believes that Alternative B2 would facilitate improvements to the Port of Oakland, which will contribute to the vitality of the regional economy, without jeopardizing the integrity of the Bay's resources, and thus appears to be the most consistent with the Commission's laws

and policies. Other alternatives discussed in the DSEIR/S, which involve disposal of dredged material at the existing site near Alcatraz Island or at the Bay Farm Island Borrow Area, are not consistent with the Commission's law and policies, and are therefore not supported by Commission staff. Commission staff comments regarding Alternative B2, as well as other aspects of the proposed navigation improvement project, are discussed in full below.

Jurisdiction

The Commission's area of jurisdiction includes all tidal areas of the Bay up to the line of highest tidal action, all areas formerly subject to tidal action that have been filled since September 17, 1965, and the "shoreline band," which extends 100 feet inland from and parallel to the Bay jurisdiction. The Commission also has jurisdiction over the Suisun Marsh and other managed wetlands adjacent to the Bay, salt ponds, and certain waterways.

Certain activities, including dredging and disposal, conducted within the Commission's jurisdiction require Commission permits. Permits are issued only if the Commission finds the activities to be consistent with the McAteer-Petris Act and the policies and findings of the Bay Plan. In addition to any needed permits under its state authority, federal activities that affect the Commission's jurisdiction are subject to consistency review by the Commission, pursuant to the federal CZMA, for their compliance with the Commission's federally-approved coastal management program for the Bay.

The DSEIR/S, Section 2.9.2.4, page 2-62, correctly states that the Commission implements the Coastal Zone Management Act for the San Francisco Bay segment of the coastal zone. However, from reviewing the DSEIR/S, the casual reader might assume that the Commission's federally-approved coastal management program is limited to the Commission's Bay Plan. Actually, the management plan also includes the Commission's laws, the McAteer-Petris Act and the Suisun Marsh Preservation Act. Also it includes the Suisun Marsh Protection Plan, and the Commission's regulations and other plans, like the Seaport Plan and special area plans. Further, Section 2.9.3, which lists state of California laws, fails to list either the McAteer-Petris Act or the Suisun Marsh Preservation Act. We request that these sections, as well as Table 2.9-1, page 2-58 to 2-59, be amended to correctly reflect the Commission's applicable laws and policies.

The DSEIR, Section 2.9.5, page 2-70 to 2-71, states correctly that Commission authorization would be necessary to implement the following activities associated with the proposed navigation improvement project and disposal of material at sites associated with Alternative B2: (1) dredging; and (2) installing pipelines and other facilities to off-load dredged material at Sonoma Baylands, Ninth Avenue Terminal, and Galbraith Golf Course. Section 2.9.5 states that construction of levees and re-routing of the drainage ditch at the Galbraith Golf Course would require Commission authorization as well. The *Final Environmental Impact Report/Statement* (FEIR/S) should clarify whether these particular activities will occur within the Commission's jurisdiction, and require Commission authorization.

In the event Alternative B2 is implemented, Commission consistency concurrence and/or permit authorization would be necessary for disposal of dredged material at Sonoma Baylands, the Ninth Avenue Terminal—as recognized in Section 5.3.7.2, page 5-17—, and at portions of the West Contra Costa Landfill located within the Commission's jurisdiction. The FEIR/S should identify where, within the Commission's jurisdiction, dredged material will be disposed at the above-referenced potential disposal sites, and address whether disposal at these sites will be consistent with the Commission's laws and policies including those regarding "fill," as defined by the McAteer Petris Act, as discussed further below. In addition, Commission consistency concurrence and/or permit authorization is necessary to dispose dredged material at portions of Galbraith Golf Course located within the Commission's jurisdiction. The FEIR/S should indicate whether or not disposal of dredged material at the Galbraith Golf Course would occur within the Commission's jurisdiction.

The DSEIR/S, Section 4.4.5.6, page 4.4-44, states that one acre of tidal wetland will be lost as a result of disposing dredged material at the Galbraith Golf Course. The FEIR/S should indicate whether or not the above-referenced tidal wetland is located within the Commission's jurisdiction, and, if so, whether "fill" at this location would be consistent with the Commission's laws and policies.

- 8 | The DSEIR/S, Section 5.3.6.1, page 5-14, states that the Commission has jurisdiction within 100 feet of the tidal portion of the drainage channel crossing the Galbraith Golf Course. It is our understanding that the Commission's shoreline band jurisdiction only extends 100 feet from the mouth of the drainage channel. The FEIR/S should indicate the location of the Commission's shoreline band jurisdiction at the Galbraith Golf Course site.
- 9 | The DSEIR/S, Section 2.2.1, page 2-1, indicates that the navigation improvement project includes deepening, "by the Port," of vessel berthing areas at the Inner and Outer Harbor that are not currently maintained at -42 feet MLLW. If the Port of Oakland intends to undertake deepening activities separate from those conducted by the Corps, it will need to obtain Commission permit authorization in order to do so. The FEIR/S should expand on this aspect of the proposed project to identify: the berths which will be deepened; the acreage and volume of proposed berth-deepening area(s); and the party which will be responsible for deepening the berthing areas.
- 10 | Lastly, as referenced above, the DSEIR/S, Section 2.9.5, page 2-70 to 2-71, states that Commission consistency determination would be needed for the dredging associated with the navigation improvement project as well as pipeline activity associated with disposal at Sonoma Baylands and Galbraith Golf Course. The Commission has granted Permit No. M91-61 to the State Coastal Conservancy and the Sonoma Land Trust and granted Consistency Determination No. 3-94 to the Corps to prepare the Sonoma Baylands site for tidal restoration. We believe that the Corps will need to make a consistency determination regarding the disposal of dredged material at the Sonoma Baylands site as part of the proposed tidal restoration. Additionally, the Corps may need to submit a permit application to the Commission for the aforementioned activities or any others with potential water quality impacts.

San Francisco Bay Plan Dredging Policies

The Dredging findings and policies of the Bay Plan, which are cited in the DSEIR/S, Section 2.9.4.1, page 2-67 to 2-68 (attached), recognize, in part, that dredging is essential for certain water-oriented or other important public purposes, but that limited capacity and potential adverse impacts to Bay resources make continued in-Bay disposal problematic, and thus that dredged material should be disposed, if feasible, at ocean or non-tidal sites, preferably for beneficial use. In light of the Bay Plan's dredging policies, Commission staff supports Alternative B2 as the preferred disposal option for the proposed navigation improvement project.

- 11 | 1. **Alcatraz Dredged Material Disposal Site (SF-11).** The DSEIR/S, Section 2.9, beginning on page 2-57, discusses, among other things, applicability and relevance of laws and regulations regarding the proposed navigation improvement project including disposal Alternative B2. Table 2.9-1, page 2-58 to 2-59, which summarizes compliance of the proposed activities with certain laws and regulations, shows that disposal of up to 3.5 mcy of dredged material at the Alcatraz Dredged Material Disposal Site (SF-11) would be in "full compliance" with the CZMA and the Bay Plan. However, pursuant to Bay Plan Dredging Policy No. 2, disposal at the Alcatraz site would comply *only* if, among other things, the applicant (e.g. the Corps) had demonstrated that: (1) non-tidal and/or ocean disposal was infeasible; and (2) disposal of material was consistent with the advice of the Regional Board, the California Department of Fish and Game (DFG) and the National Marine Fisheries Service. In addition, pursuant to Bay Plan Dredging Policy No. 5, use of the Alcatraz disposal site complies with the Commission's laws and policies only if disposed material is carefully managed to ensure that the amount and timing of disposal does not create navigational hazards, does not adversely affect Bay currents or its natural resources, or does not foreclose the use of the site by other projects critical to the regional economy.

Commission staff believes that placement of 3.5 mcy of new-work dredged material at the Alcatraz disposal site, in addition to material generated from other maintenance projects, would likely have adverse impacts on natural resources at or around the site and likely increase the size of the mound at the site, thereby exacerbating potential navigational impacts. Therefore, we believe it is unlikely that use of the Alcatraz site for disposal of dredged material from the deepening project would "fully comply" with the Commission's laws and policies, and request that the DSEIR/S be amended to reflect this.

2. **Bay Farm Island Borrow Area.** Commission staff has significant concerns regarding the Bay Farm Island Borrow Area which is a disposal alternative for the proposed project. The site is not designated in the Commission's laws and policies for such use, and the establishment of a major confined

or unconfined aquatic (in-Bay) disposal site is not consistent with Bay Plan dredging policies, which emphasize designation and use of *non-Bay* options. Further, it is unlikely that the Commission could approve and designate this dredged material disposal alternative without extensive information, supplemental to the DSEIR/S, to address all impacts associated with use of the site.

In particular, the Bay Farm Island Borrow Area would extend disposal impacts to a new area of the Bay, and would establish a confined disposal operation that would eliminate existing benthic habitat, change local bathymetry to reduce the volume of open water area, and result in impacts on surrounding Bay resources which, to date, remain unquantified. Further, confined aquatic disposal is not likely to retain all material and thus could adversely impact water quality, and thereby not be consistent with Bay Plan policies regarding Water Quality, as discussed below. These impacts are of particular concern due to the limited and important resources located within the Borrow site vicinity, including eelgrass beds, Pacific herring (observed spawning along the rim of the site by DFG in December, 1993), and least terns, an endangered species. An extensive stretch of beach located at the Alameda shoreline could also be adversely impacted by dredged material disposal at the Bay Farm Island Borrow site.

To consider such an alternative, the Commission would need to be provided with information which fully addresses all potential ecological impacts associated with disposal at the Bay Farm Island Borrow site. At a minimum, this information would need to include: a detailed project proposal; a detailed survey of existing conditions at and surrounding the site; and a complete analysis of potential physical, chemical, and biological impacts of disposal. To be technically supportable, such studies would need to be comprehensive, particularly given the range and depth of studies deemed necessary for the U.S. EPA to designate the ocean disposal site (proposed for use under Alternative B2).

Commission staff is aware that the Corps has conducted some studies of the Bay Farm Island Borrow site. The limited information provided within the DSEIR/S insufficiently addresses concerns regarding the use of this, or any other new confined or unconfined aquatic disposal site. Commission staff believes that a new confined or unconfined in-Bay site cannot be justified without implementing a pilot project which includes a monitoring program. The duration of such a project, including data evaluation, would likely be three to ten years. Thus such sites are not likely to be feasible within the short time-frame of this project. Therefore, we believe that the Bay Farm Island Borrow site should be added to the list, within Section 2.6 of the DSEIR/S, of disposal sites to be eliminated from further consideration at this time.

12

In-Bay disposal of dredged material continues to be controversial. Questions have been raised about the environmental impacts of ongoing disposal projects and there exists significant opposition to even the continuation of present disposal practices in the Bay. Consequently, we believe that intensified in-Bay disposal should not be allowed until: the impacts of existing disposal practices have been evaluated, quantified, and mitigated; and intensive study of alternatives to in-Bay disposal are complete, particularly those regarding use of dredged material as a resource. While the joint-agency Long Term Management Strategy (LTMS) is now considering these issues, it will be difficult to finalize environmental review of a new in-Bay disposal site prior to completion of this analysis.

For the reasons cited above, we believe a new in-Bay disposal site is impractical and likely could not be approved by the Commission in the near-term. Therefore, at this time, this option does not appear to be a viable alternative for the Oakland Harbor deepening project.

3. Pacific Herring Spawning Issues. The Bay Plan Dredging Policy No. 1 states, in part, that Commission authorization of dredging activities will occur if, among other things, it finds "important fisheries and Bay natural resources would be protected." The DSEIR/S, Section 4.4.4.1, page 4.4-16, states that proposed dredging activities could adversely impact herring spawning in the area where dredging would occur. Section 4.4.4.2, page 4.4-18, indicates that "a qualified marine biologist observer [will be stationed] on board the dredge plant during periods when dredging might have a greater effect on fish or wildlife, such as during herring spawning season from December through February to redirect the dredging operation away from and thus avoid effects on fish." The DFG has advised the Commission that any dredging between December 1st, when herring spawning officially begins, to March 1st, when spawning is essentially completed, is acceptable only if it can clearly be demonstrated that it is necessary to do so, and only then if: (1) a professional biologist is stationed at the dredging site and, if spawning is

detected at or within 200 meters of dredging operations, dredging ceases for a minimum of 14 days or until it can be determined that the hatch is completed and larval herring concentrations have left the site, at which time dredging could be resumed; and (2) dredging does not occur between December 31 and March 1.

- 13 | In light of DFG's advice, dredging at the Inner and Outer Harbors during the herring spawning season without complying with that agency's recommendations would likely be inconsistent with Bay Plan Dredging Policy No. 1. The FEIR/S should discuss other possible measures to mitigate potential impacts to herring spawning at the dredging site, including the possibility of ceasing dredging operations altogether during the herring spawning season and/or complying with the DFG's above-referenced guidance, and whether implementation of additional measures would make the proposed activity consistent with the Commission's laws and policies. Alternatively, the FEIR/S should include information from DFG clarifying its position on measures to protect herring resources in regards to the proposed project.

Fills in Accord with the Bay Plan

- 14 | Commission authorization for projects involving "fill," as defined by the McAteer Petris Act, is possible when the fill is the minimum necessary to achieve the project purpose and if it meets certain conditions (see attached). As previously discussed, if dredged material is disposed below the line of highest tidal action at Sonoma Baylands, the Ninth Avenue Terminal, or at the West Contra Costa Landfill, the FEIR/S should discuss whether this activity would be consistent with the Commission's laws and policies.
- 15 | The DSEIR/S, Section 2.9, beginning on page 2-57, discusses the applicability and relevance of laws and regulations to the proposed navigation improvement project and Alternative B2. Table 2.9-1, pages 2-58 to 2-59, which summarizes compliance of these activities with laws and regulations indicates that disposal of dredged material at the Sonoma Baylands would be in "full compliance" with the Coastal Zone Management Act and the Bay Plan. As discussed above, in the event this particular disposal activity occurs within the Commission's Bay jurisdiction, "full compliance" with the Commission's laws and policies would only be possible if, among other things: the disposal activity was a justifiable type of fill; there is no alternative upland location; the fill proposed is the minimum amount necessary; and the public benefits outweigh the public detriments of the project. We believe that minimal amounts of temporary fill to off-load dredged material to non-tidal sites can likely be found to comply with the Commission's laws and policies. We request that the FEIR/S provide estimates of location, amount, and consistency of proposed fill with the Commission's laws and policies.

San Francisco Bay Plan Water Quality Policies

The Bay Plan Water Quality policies (attached) provide, in part, that "[w]ater quality in all parts of the Bay should be maintained at a level that will support and promote the beneficial uses of the Bay as identified in the Regional Water Quality Control Board's Basin Plan." and that "[t]he policies, recommendations, decisions, advice and authority of the State Water Resources Control Board and the Regional Water Quality Control Board, should be the basis for carrying out the Commission's water quality responsibilities."

- 16 | The DSEIR/S, Table 2.9-1, page 2-57 to 2-59, indicates that use of the Bay Farm Island Borrow site for confined or unconfined dredged material disposal would not comply with the CZMA, administered within the Bay by the Commission. The DSEIR/S contains insufficient information to evaluate impacts associated with confined disposal at the Bay Farm Borrow site on water quality. This lack of data is clearly illustrated in Section 3.2.4.3, page 3.2-23 to 3.2-24, concerning hydrology, and water quality issues associated with the Borrow Area setting and use. We believe that a single-one day current velocity profile analysis conducted within the excavated portion of the Borrow Area and the presence of fine-grained material in the Borrow Area are inadequate to draw conclusions regarding the sedimentation and erosion rates within and adjacent to the site. Although, an additional study of the site was conducted by the Corps in 1992, the study did not appear to provide the detailed analysis necessary to draw conclusions regarding water quality impacts associated with use of the site for dredged material disposal. As discussed previously, use of this site would likely conflict with the Commission's laws and policies including, but not limited to, those related to water quality.

San Francisco Bay Plan Marshes and Mudflats Policies

The Bay Plan Marshes and Mudflats Policy No 3. (attached) states, in part, that to offset necessary Bay fill and to augment existing marshes, former marshes should be restored and "some new marshes should be created through carefully placed lifts of dredged material." The Sonoma Baylands Project (part of Alternative B2) would restore tidal wetlands on a 309-acre site using dredged material. We believe that such marsh restoration is completely consistent with the Commission's Marshes and Mudflats policies.

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Commission staff believes that key elements to the success of restoring tidal wetlands at the Sonoma Baylands site are monitoring and, if needed, remediation. Proposed monitoring and restoration plans will be central to the Commission's consideration of the proposal to place dredged material and restore tidal action at the site. As part of the LTMS Reuse/Upland studies, a proposed monitoring plan was prepared. Presently, we are also talking with the U.S. Geological Survey which is interested in studying the restored site. The DSEIR/S does not discuss how the "success" of tidal restoration will be measured or monitored at the site or measures for remediating problems which arise while the site is undergoing restoration. The FEIR/S should discuss monitoring and remediation plans for the Sonoma Baylands project; it should also note that implementation of remediation activities at the site would likely require coordination with and/or authorization by the Commission.

The Bay Plan Marshes and Mudflats Policy No. 1 states, in part, that "[m]arshes and mudflats should be maintained to the fullest possible extent to conserve fish and wildlife and to abate air and water pollution. Filling and diking that eliminate marshes and mudflats should therefore be allowed only for purposes providing substantial public benefits and only if there is no reasonable alternative." The DSEIR/S, Section 4.4.5.6, page 4.4-44, states that one acre of tidal wetland will be lost as a result of disposing dredged material at the Galbraith Golf Course. As discussed previously, the FEIR/S should indicate whether or not this tidal wetland is located within the Commission's jurisdiction, and, if so, whether the proposed mitigation (page 4.4-46) is consistent with the Commission's mitigation policies.

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Additional Comments

The DSEIR/S, Section 2.6, page 2-17 to 2-20, includes a discussion regarding upland disposal options and reasons for eliminating several of these options from further study for the proposed project. Section 2.6.2, page 2-17, states that "detailed implementation plans have not been developed for any of these sites to identify the volume of dredged material needed or the placement of that material." Section 10.1, page 10-3, states that the potential disposal capacity of sites identified as "highly feasible" through LTMS Upland/Reuse studies "is not further quantifiable at this time." However, preliminary engineering feasibility studies have already been developed through the LTMS Upland/Reuse Studies for several sites discussed in this section, which specifically address issues such as potential disposal capacity. In fact, these plans estimate that up to 7 to 11.4 mcy of dredged material could be used for wetland restoration at the Cargill (evaporator) salt ponds, west of the Napa River (Napa County), and that up to 16.1 mcy of dredged material could be used for the same purpose at Skaggs Island (Sonoma County). The FSEIR/S should present this information not only for the purpose of clarification but also to apprise others interested in progress being made towards increasing the capacity and number of upland disposal opportunities around the Bay Area.

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Section 2.6.2 states that certain potential wetland restoration/enhancement sites were eliminated from further consideration because "these sites are not yet available to accept dredged material and because other wetland enhancement sites are being evaluated for this project..." We agree that potentially feasible sites can be discounted because they will not be available within a reasonable time-frame for the navigation improvement project, but only if it can be documented that either diligent efforts to implement such sites were not successful, or that alternate acceptable sites will be implemented instead. The proposed alternative appears to include acceptable alternatives to restoration sites which were not pursued.

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The DSEIR/S, Section 2.6.2.1, page 2-18, states that purchase of the Cargill west-side (evaporator) salt ponds is currently under negotiation. The FSEIR/S should indicate that a sale agreement for this property was approved in February, 1994, and thus that the property is likely to become public in the near future.

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22 | The DSEIR/S, Section 2.7.7, beginning on page 2-41, discusses the Port/Landfill disposal option (as part of Alternative B2) which would be implemented if up to 100,000 cy of material is deemed unsuitable for upland disposal by the Regional Board. As discussed in that Section, up to 30,000 cy of material would be placed at a height of three-feet at the Port's Ninth Avenue Terminal, and left to dry over a 3-month period. Once dried, the material would be transported to one of three sanitary landfills. This discussion implies that the 100,000 cy could be rehandled at the Ninth Avenue Terminal over the 24- to 27-month period in which the project is scheduled to take place. However, according to *Engineering Elements of Dredged Material Rehandling Facilities* (Gahagan and Bryant Associates, 1993), prepared as part of the LTMS Upland/Reuse studies, dredged material placed at a similar height at other Bay Area sites is estimated to take up to 18 months to dry. If Gahagan and Bryant's estimate is accurate, it appears that the capacity of the Ninth Avenue Terminal may be inadequate to rehandle 100,000 cy of dredged material over a 24- to 27-month period. The FSEIR/S should discuss whether or not the Ninth Avenue Terminal could realistically rehandle up to 100,000 cy over a 24- to 27-month period, and what measures would be taken in the event additional capacity is needed.

Conclusion

The Commission staff supports the selection of Alternative B2 for the Oakland Harbor deepening project. We believe the analysis of both the navigation improvement project and the variety of potential disposal options for material generated from the proposed project to be thorough and well-written. We commend the Corps and the Port of Oakland for their careful investigation, analysis, and selection of Alternative B2 as the preferred disposal option. As you are well aware, implementation of this disposal alternative would mark an extremely important step towards managing dredged material in an environmentally and economically sound manner, and thereby ensuring protection of the Bay's diverse resources, a primary goal of the LTMS as well as a guiding principle of our agency.

Thank you for considering our comments regarding the DSEIR/S. We look forward to reviewing the FSEIR/S and other documents related to the proposed navigation improvement project. If you should have any questions regarding this letter, please feel free to contact me at 415-557-3686.

Sincerely,



JAIME MICHAELS
Coastal Program Analyst

enc.

JM/EL/eo

cc: Ms. Jody Zaitlin, The Port of Oakland
Mr. Michael Kahoe, California Environmental Protection Agency
Mr. Tom Gandesbery, S. F. Bay Regional Water Quality Control Board
Mr. Brian Ross, U.S. Environmental Protection Agency
Mr. James Raives, California Coastal Commission
Mr. Bob Tasto, Department of Fish and Game
Ms. Linda Martinez, State Lands Commission
Mr. Mike Thabault, National Marine Fisheries Service
Mr. Darren Fong, U.S. Fish and Wildlife Service
Ms. Nadel Gayou, Resources Agency

Part III

The Bay as a Resource:

Findings and Policies

Fish and Wildlife

Findings and Policies Concerning Fish and Wildlife in the Bay

Findings

a. San Francisco Bay is by far the largest estuary along California's long coastline. It is an essential resting place, feeding area, and wintering ground for millions of birds on the Pacific Flyway from Canada to Mexico. Nearly one hundred species of fish are also supported by the estuarine environment that includes marshlands, mudflats, salt production lands, and open water.

b. Human benefit from the fish and wildlife of the Bay includes food, economic gain, recreation, scientific research, education, and an environment for living. No comprehensive estimate of the value of fish and wildlife for these purposes is available, but such value can only increase unless man diminishes the Bay. In future decades the Bay may become of inestimable additional value as a fish and marine plant "farm," augmenting the nation's and the world's food resources for a rapidly-growing population.

c. Maintaining fish and wildlife depends upon availability of: (1) sufficient oxygen in the Bay waters; (2) adequate amounts of the proper foods; (3) sufficient shelter space; and (4) proper temperature, salt content, and velocity of the water. Requirements vary according to the species of fish and wildlife. Maintenance of these habitat requirements is essential to insure for present and future generations of Californians the benefit of fish and wildlife in the Bay. The key elements of the Bay fish and wildlife habitat are: marshes and mudflats, total water volume and total surface area of the Bay, good water circulation, and some fresh water inflow.

d. Plan Map No. 1, Natural Resources of the Bay, indicates the shoreline areas of greatest value for shorebirds and waterfowl. All parts of San Francisco Bay are assumed to be important for the perpetuation of fish and other marine life because any reduction of habitat reduces the marine population in some measure.

Policies

1. The benefits of fish and wildlife in the Bay should be insured for present and future generations of Californians. Therefore, to the greatest extent feasible, the remaining marshes and mudflats around the Bay, the remaining water volume and surface area of the Bay, and adequate fresh water inflow into the Bay should be maintained.

2. Specific habitats that are needed to prevent the extinction of any species, or to maintain or increase any species that would provide substantial public benefits, should be protected, whether in the Bay or on the shoreline behind dikes. Such areas on the shoreline are designated as Wildlife Areas on the Plan maps.

Water Quality

Findings and Policies Concerning Water Quality in the Bay

Findings

a. San Francisco Bay receives a variety of wastes from numerous sources throughout its tributary drainage area. These include industrial and municipal waste, urban and agricultural surface runoff, sedimentation from upland erosion, vessel wastes, oil and chemical spills, and leachate from landfills and toxic dumps. Pollution occurs when waste discharges unreasonably interfere with, damage, or destroy one or more of the beneficial uses of the waters of the Bay. Pollutants include substances that are toxic, that unduly stimulate organic growth in the Bay, or that deplete dissolved oxygen. Polluted waters may be offensive to the senses, unsafe for human contact or use, damaging or lethal to aquatic life, or unsuitable for industrial use.

b. Pollution from past waste discharges resulted in harm to fish and wildlife and the Bay's beneficial uses. Implementation of state and federal water pollution control programs by public agencies, particularly the Environmental Protection Agency, the State Water Resources Control Board, and the San Francisco Bay Regional Water Quality Control Board, have decreased significantly the pollutant levels in waste discharges to the Bay, resulting in dramatic improvements in the quality of Bay waters. However, water pollution still impairs Bay water quality and the beneficial uses of the Bay. Of particular concern is the potential for cumulative long-term effects on the Bay from toxic pollutants. Water quality varies significantly within the Bay due to the pattern of waste discharges and the varying capability of the Bay to disperse, flush, and assimilate pollutants. Certain localized areas are seriously polluted with toxic substances. Additionally, toxic disposal sites on the shoreline threaten both Bay water quality and the development and use of certain areas of the shoreline by the public.

c. Many strategies can be used to reduce the discharge of pollutants to the Bay, including: (1) assuring adequate treatment of wastes discharged to the Bay and its tributaries in compliance with standards set by the State Water Resources Control Board, Regional Water Quality Control Board, and the Environmental Protection Agency; (2) directing treated waste discharges to the ocean

(after assuring that the marine environment will be protected); (3) eliminating discharge of toxic substances into the Bay; (4) cleaning up existing toxic sites in the Bay, on the shoreline, or in upland areas that drain into the Bay; and (5) preventing increased sedimentation of the Bay by controlling upland soil erosion, particularly during the land development process.

d. The harmful effects of pollutants reaching the Bay can be reduced by maximizing its capacity to assimilate, disperse, and flush pollutants. Key elements that affect the Bay's natural capacity to assimilate, disperse, and flush wastes are: (1) the volume and circulation of water flowing in and out with the tides and in fresh water inflow; (2) the rate of oxygen interchange at the surface of the Bay; and (3) the extent and distribution of tidal marshes.

e. The State Water Resources Control Board is responsible for formulating and adopting state policy for water quality control pursuant to the state Porter-Cologne Water Quality Control Act and federal Clean Water Act. The State Board is responsible for approving the water quality control plans of the nine regional water quality control boards, and establishing salinity standards for the Bay and Delta to protect the beneficial uses of these waters. The San Francisco Bay Regional Water Quality Control Board is charged with designating, protecting, and enhancing the beneficial uses of the waters of the San Francisco Bay Basin. The Regional Board states the beneficial uses of the Bay waters and the water quality objectives and waste discharge standards in its Water Quality Control Plan, San Francisco Bay Basin, which it carries out through adoption and enforcement of waste discharge requirements and certification of Army Corps of Engineers' permits.

Policies

1. To the greatest extent feasible, the Bay marshes, mudflats, and water surface area and volume should be maintained and, whenever possible, increased. Fresh water inflow into the Bay should be maintained at a level adequate to protect Bay resources and beneficial uses. Bay water pollution should be avoided.

2. Water quality in all parts of the Bay should be maintained at a level that will support and promote the beneficial uses of the Bay as identified in the Regional Water Quality Control Board's Basin Plan. The policies, recommendations, decisions, advice and authority of the State Water Resources Control Board and the Regional Water Quality Control Board, should be the basis for carrying out the Commission's water quality

responsibilities.

3. Shoreline projects should be designed and constructed in a manner that reduces soil erosion and protects the Bay from increased sedimentation through the use of appropriate erosion control practices.

4. Polluted runoff from projects should be controlled by the use of best management practices in order to protect the water quality and beneficial uses of the Bay, especially where water dispersion is poor and near shellfish beds and other significant biotic resources. Whenever possible, runoff discharge points should be located where the discharge will have the least impact. Approval of projects involving shoreline areas polluted with hazardous substances should be conditioned so that they will not cause harm to the public or the beneficial uses of the Bay.

Amended March 1987

Water Surface Area and Volume

Findings and Policies Concerning Bay Water Surface Area and Volume

Findings

a. Dissolved oxygen is needed to support marine life and to help break down pollutants in the water. The amount of oxygen in the Bay is largely determined by the surface area of the Bay because primary sources of oxygen are: (1) churning waves that trap oxygen from the air; (2) the water surface, which absorbs oxygen from the air; and (3) the exposed mudflats, which both produce and absorb oxygen while the tide is out and transfer it to the water when the tide comes in.

b. Water circulation might be greatly improved by some of the major barrier proposals that have been made for the Bay. But barriers affect—for better or for worse—the appearance and ecology of the Bay, sedimentation, flood control, and existing and proposed uses of the shores of the Bay. They are also very costly. For all barrier proposals fully evaluated thus far, disadvantages outweigh advantages.

c. About 40 percent of the original surface area of the Bay has been diked off or filled in since 1850. Because this has involved some of the most effective oxygenation areas, the ability of the Bay to take up oxygen has been sharply reduced.

d. The dissolved oxygen that is absorbed at the Bay surface or from the mudflats must be transmitted to the deeper waters by mixing of the water. The necessary mixing is accomplished by tidal interchange, by fresh water inflow from tributaries, and by circulation resulting from wind action upon the surface of the Bay. The strength of tidal flow and water circulation are greatly affected by the shape of the Bay bottom and the shoreline; fills, dikes, and piers can speed or retard water circulation, depending upon both the water circulation pattern in the affected area and the shape of the fill, dike, or pier.

Policies

1. The surface area of the Bay and the total volume of water should be kept as large as possible in order to maximize active oxygen interchange, vigorous circulation, and effective tidal action. Filling

and diking that reduce surface area and water volume should therefore be allowed only for purposes providing substantial public benefits and only if there is no reasonable alternative.

2. Water circulation in the Bay should be maintained, and improved as much as possible. Any proposed fills, dikes, or piers should be thoroughly evaluated to determine their effects upon water circulation and then modified as necessary to improve circulation or at least to minimize any harmful effects.

3. Because further study is needed before any barrier proposal to improve water circulation can be considered acceptable, the Bay Plan does not include any barriers. Before any proposal for a barrier is adopted in the future, the Commission will be required to replan all of the affected shoreline and water area.

Marshes and Mudflats

Findings and Policies Concerning Marshes and Mudflats Around the Bay

Findings

a. Salt marshes are extraordinarily fertile. Living marsh plants fix the energy of sunlight into their tissues through photosynthesis, and expel oxygen into the surrounding environment. One type of marsh plant, cordgrass, has seven times the energy-generating capacity or food value of an equal acreage of wheat.

b. Large numbers of birds, including ducks and geese, come to the marshes to feed on the lush vegetation or on the brackish-water animals that thrive there. Their wastes, together with the decomposition products of plant decay and other elements of the complex food web, contribute nutrients from the marshes to the mudflats and the shallows of the Bay margin, supporting a vast marine life nursery.

c. Most marine life in the Bay either depends directly on the marshes and mudflats for its sustenance or indirectly depends upon them by feeding upon other marine life so nourished. Shorebirds depend upon the marshes and mudflats for both food and shelter.

d. Algae on the mudflats, exposed to abundant light alternating with abundant water, produce and expel oxygen into the water and into the air. This is an important source of oxygen that water must have both to support marine life and to combat water pollution.

e. The marshlands bordering the Bay now total about 75 square miles. In 1850, before diking and filling had been begun, marshlands covered some 300 square miles.

Policies

1. Marshes and mudflats should be maintained to the fullest possible extent to conserve fish and wildlife and to abate air and water pollution. Filling and diking that eliminate marshes and mudflats should therefore be allowed only for purposes providing substantial public benefits and only if there is no reasonable alternative. Marshes and mudflats are an integral part of the Bay tidal system and therefore should be protected in the same manner as open water areas.

2. Any proposed fills, dikes, or piers should be thoroughly evaluated to determine their effects on marshes and mudflats, and then modified as necessary to minimize any harmful effects.

3. To offset possible additional losses of marshes due to necessary filling and to augment the present marshes: (a) former marshes should be restored when possible through removal of existing dikes; (b) in areas selected on the basis of competent ecological study, some new marshes should be created through carefully placed lifts of dredged spoils; and (c) the quality of existing marshes should be improved by appropriate measures whenever possible.

Smog and Weather

Findings and Policies Concerning Effect of the Bay on Smog and Weather

Findings

- a. The Bay plays a significant role in determining the climate of the Bay Area.
- b. The waters of the Bay maintain a relatively constant temperature, and this helps to moderate extremes of heat and cold in surrounding areas. The Bay surface provides a cool pathway for summertime ocean winds, enabling them to help cool areas at the "ends" of the Bay (the Santa Clara Valley and the Carquinez Strait areas).
- c. Present research indicates that filling a substantial part of the Bay—as much as 25 percent—would cause: (1) higher summertime temperatures and reduced rainfall in the Santa Clara Valley and the Carquinez Strait-Suisun Bay area; and (2) increases in the frequency and thickness of both fog and smog in the Bay Area. Converting Bay surface to land would increase smog-producing temperature inversions in the Bay Area; in addition, the new land would probably be used for smog-producing concentrations of urban developments, including automobiles.

Policies

1. To the greatest extent feasible, the remaining water volume and surface area of the Bay should be maintained.

Shell Deposits

Findings and Policies Concerning Shell Deposits in the Bay

Findings

- a. Oyster shells are dredged from the Bay floor primarily for use as lime in the production of cement. A small portion of the shells are used as soil conditioner, as cattle feed, and as poultry grit by local poultry and egg producers.
- b. The shell deposits are an important mineral resource because the other principal source of lime, limestone, is more distantly located in Santa Clara, Santa Cruz, and San Benito Counties to the south. Cement is expensive to transport over great distances, so a nearby source of lime is important to the Bay Area economy.

Policies

1. Filling or diking that adversely affect known shell deposits, illustrated in Plan Map No. 1, Natural Resources of the Bay, should be allowed only for purposes providing more public benefit than the availability of the shells.

Control of Filling and Dredging in the Bay

Permit Procedures for Filling and Dredging Bay filling (including placement of piers, pilings, and floating structures moored in the Bay for extended periods of time) and dredging are controlled through the permit system established by the McAteer-Petris Act. The Commission is authorized to issue or deny permits for any filling and dredging in the Bay. Any public agency or owner of privately-held lands is required to obtain a permit before proceeding with fill or dredging.

Permits are granted or denied only after public hearings (except for permits for emergency or minor repairs to existing installations or minor improvements as provided in the Commission's regulations, which may be approved by the Executive Director) and only after the city or county having jurisdiction over the area of the proposed project has made its views known to the Commission (or has failed to do so within 90 days after notification). The McAteer-Petris Act requires the Commission to take action on a permit matter within 90 days after it has received the report from the city or county or within 90 days after it has received and filed an application from the applicant, whichever date is later. These and other requirements and procedures for permit processing are specified in the McAteer-Petris Act (Title 7.2 of the California Government Code) and in the Commission's regulations (Title 14, Division 5 of the California Administrative Code).

The Commission's decisions on permit matters are governed by the provisions of the McAteer-Petris Act and the policies of the Bay Plan. The Commission should approve a permit application if it specifically determines that a proposed project meets the following conditions, each of which is necessary for effectively carrying out the Bay Plan.

a. **Fills in Accord With Bay Plan.** A proposed project should be approved if the filling is the minimum necessary to achieve its purpose, and if it meets one of the following five conditions:

(1) The filling is in accord with the Bay Plan policies as to the Bay-related purposes for which filling may be needed (i.e., ports, water-related industry, and water-related recreation) and is shown on the Bay Plan maps as likely to be needed; or

(2) The filling is in accord with Bay Plan policies as to purposes for which some fill may be needed if there is no other alternative (i.e., airports, roads, and utility routes); or

(3) The filling is in accord with the Bay Plan policies as to minor fills for improving shoreline appearance or public access; or

(4) The filling would provide on privately-owned property for new public access to the Bay and for improvement of shoreline appearance—in addition to what would be provided by the other Bay Plan policies—and the filling would be for Bay-oriented commercial recreation and Bay-oriented public assembly purposes, with a substantial part of the project built on existing land. The Commission should issue permits under this criterion provided:

(a) The proposed project would limit the use of area to be filled to: (i) public recreation (beaches, parks, etc.), and (ii) Bay-oriented commercial recreation and Bay-oriented public assembly, defined as facilities specifically designed to attract large numbers of people to enjoy the Bay and its shoreline, such as restaurants, specialty shops, and hotels.

(b) The proposed project would be designed so as to take advantage of its nearness to the Bay, and would provide opportunities for enjoyment of the Bay in such ways as viewing, boating, fishing, etc., by keeping a substantial portion of the development, and a substantial portion of the new shoreline created through filling, open to the public free of charge (though an admission charge could apply to other portions of the project).

(c) The proposed private project would not conflict with the adopted plans of any agency of local, regional, state, or federal government having jurisdiction over the area proposed for filling, and would be in an area where governmental agencies have not planned or budgeted for projects that would provide adequate access to the Bay.

(d) The proposed project would either provide recreational development in accordance with the Bay Plan maps or would provide additional recreational development that would not unnecessarily duplicate nearby facilities.

(e) A substantial portion of the project would be built on existing land, and the project would be planned to minimize the need for filling. (For example, all automobile parking should, wherever possible, be provided on nearby land or in multi-level structures rather than in extensive parking lots.)

(f) The proposed project would result in permanent public rights to use specific areas set aside for public access and recreation; these areas would be improved at least by filling to finished grade and by installation of necessary basic utilities, at little or no cost to the public.

(g) The proposed project would, to the maximum extent feasible, establish a permanent shoreline in a particular area of the Bay, through dedication of lands and other permanent restrictions on all privately-owned and publicly-owned property Bayward of the area approved for filling.

(h) The proposed project would provide, to the maximum extent feasible, for enhancement of fish, wildlife, and other natural resources in the area of the development.

(5) The filling would provide on privately-owned or publicly-owned property, for new public access to the Bay and for improvement of shoreline appearance—in addition to what would be provided by the other Bay Plan policies—and the filling would be limited to replacement piers for Bay-oriented commercial recreation and Bay-oriented public assembly purposes, covering less of the Bay than was being uncovered. The Commission should issue permits under this criterion provided:

(a) The proposed replacement fill in its entirety, including all parts devoted to public recreation, open space, and public access to the Bay, would cover an area of the Bay smaller in size than the area being uncovered by removal of piers (pile-supported platforms), and those parts of the replacement fill devoted to uses other than public recreation, open space, and public access would cover an area of the Bay no larger than 50 percent of the area being uncovered (or such greater percentage as was previously devoted to such other uses that were destroyed involuntarily, in whole or in part, by fire, earthquake, or other such disaster, and will be devoted to substantially the same uses).

(b) The volume (mass) of structures to be built on the replacement pier (pile-supported platform) would be limited to the minimum necessary to achieve the purposes of the project.

(c) The replacement fill would be limited to piers (pile-supported platforms), rather than earth or other solid material, and, wherever possible, a substantial portion of the replacement project would be built on existing land.

(d) The pier (pile-supported platform—not a bridge) to be removed from the Bay must have:

(i) been destroyed involuntarily, in whole or in part, by fire, earthquake, or other such disaster, or

(ii) become obsolete through physical deterioration, or

(iii) become obsolete because changes in shipping technology make it no longer needed or suitable for maritime use.

If the platform itself, or the structures on it, have become obsolete, but the pilings that support the platform are structurally sound, consideration must be given to using the existing pilings in any replacement project.

(e) The proposed project must be consistent with a comprehensive special area plan for the geographic vicinity of the project, a special area plan that the Commission has determined to be consistent with the policies of the San Francisco Bay Plan, except that this provision would not apply to any project involving replacement of only a pier that had been destroyed involuntarily.

(f) The proposed project would involve replacement fill and removal of material in the same geographic vicinity (as set forth in the applicable special area plan).

(g) The proposed replacement pier would not extend into the Bay any farther than (i) the piers (pile-supported platforms) to be removed from the Bay as part of the project or (ii) adjacent existing piers.

(h) The proposed project would limit the use of the replacement pier to: (i) public recreation (beaches, parks, etc.), and (ii) Bay-oriented commercial recreation and Bay-oriented public assembly, defined as facilities specifically designed to attract large numbers of people to enjoy the Bay and its shoreline, such as restaurants, specialty shops, and hotels.

(i) The proposed project would be designed so as to take advantage of its nearness to the Bay, and would provide opportunities for enjoyment of the Bay in such ways as viewing, boating, fishing, etc., by keeping a substantial portion of the development, and a substantial portion of the new shoreline created on the replacement pier, open to the public free of charge (though an admission charge could apply to other portions of the project).

(j) The proposed project would not conflict with the adopted plans of any agency of local, regional, state, or federal government having jurisdiction over the area proposed for the replacement piers, and would be in an area where governmental agencies have not planned or

budgeted for projects that would provide adequate access to the Bay.

(k) The proposed project would either provide recreational development in accordance with the Bay Plan maps or would provide additional recreation development that would not unnecessarily duplicate nearby facilities.

(l) The project would be planned to minimize the need for filling. (For example, all automobile parking should, wherever possible, be provided on nearby land or in multi-level structures rather than in extensive parking lots.)

(m) The proposed project would result in permanent public rights to use specific areas set aside for public access and recreation; these areas would be improved at least to finished grade and by installation of necessary basic utilities, at little or no cost to the public.

(n) The proposed project would, to the maximum extent feasible, establish a permanent shoreline in a particular area of the Bay, through dedication of lands and other permanent restrictions on all privately-owned and publicly-owned property bayward of the area approved for piers.

(o) The proposed project would provide, to the maximum extent feasible, for enhancement of fish and wildlife and other natural resources in the area of the development, and in no event would result in net damage to these values.

b. Safety. A proposed project should be approved by the Commission if its Engineering Criteria Review Board determines that the proposed project is in accordance with the policies for Safety of Fills (page 13). The Engineering Criteria Review Board, appointed by the Commission in accordance with the policies for Safety of Fills, consists of 11 members who are leading professionals in the fields of geology, structural engineering, and civil engineering (with specialty in soils engineering).

c. **Public Access.** A proposed fill project should increase public access to the Bay to the maximum extent feasible, in accordance with the policies for Public Access to the Bay (page 26).

d. **Effects on the Bay.** A permit for a proposed fill, dike, or pier, should be approved if it has been evaluated on the basis of the policies on Water Quality (page 8), Smog and Weather (page 10), Water Surface Area and Volume (page 9), and Marshes and Mudflats (page 9), and modified as necessary to minimize any harmful effects. Proposed dredging should be in accordance with the Dredging policies (page 15).

e. **Valid Title.** Because there is some question as to the conditions under which some private parties originally received lands in the Bay, a private claimant should be required to show that he or she has a valid title to any Bay lands proposed for filling. Ordinarily, this could be done by submission of a current title insurance report including the derivation of title from original sale by the State. Where titles are disputed, the legal issues should be resolved as soon as possible by court action or other appropriate steps.

f. **Public Trust.** Virtually all the publicly and privately-held unfilled tidelands and submerged lands within the jurisdiction of the Commission are subject to the public trust. The public trust is a paramount public property right held in trust by the State for the benefit of the public. Title to this public trust ownership is vested in the State Lands Commission or legislative grantees. The purpose of the public trust is to assure that the lands to which it pertains are kept for trust uses, for example commerce, navigation, fisheries, wildlife habitat, recreation, and open space. The McAteer-Petris Act and the Bay Plan are an exercise of authority by the Legislature over public trust lands and establish policies for meeting public trust needs. As a result, the public trust ownership provides additional support for Commission decisions affecting such lands. When the Commission takes any action affecting lands subject to the public trust, it should assure that the action is consistent with the public trust needs for the area and, in case of lands subject to legislative grants, should also assure that the terms of the grant are satisfied and the project is in furtherance of state-wide purposes.

g. **Appearance.** Plans for a proposed fill project should be submitted to the Design Review Board appointed by

the Commission and consisting of professionals in the fields of urban design, architecture, and landscape architecture. The Design Review Board should determine whether the proposed project is in accordance with the policies for Appearance, Design, and Scenic Views (page 29), and should report its recommendations to the Commission before a permit is issued. The jurisdiction over appearance and design is advisory, and the Commission encourages local governing bodies to exercise their controls in accordance with the Commission's policies on Appearance and Design and the Design Review Board's recommendations.

h. **Mitigation.** Mitigation for the unavoidable adverse environmental impacts of any Bay fill should be considered by the Commission in determining whether the public benefits of a fill project clearly exceed the public detriment from the loss of water areas due to the fill, and whenever mitigation is necessary for the Commission to comply with the provisions of the California Environmental Quality Act. Whenever mitigation is needed, the mitigation program should be provided as part of the project. Mitigation should consist of measures to compensate for the adverse impacts of the fill to the natural resources of the Bay, such as to water surface area, volume, or circulation and to fish and wildlife habitat or marshes or mudflats. Mitigation is not a substitute for meeting the other requirements of the McAteer-Petris Act concerning fill. When mitigation is necessary to offset the unavoidable adverse impacts of approvable fill, the mitigation program should assure:

(1) That benefits from the mitigation would be commensurate with the adverse impacts on the resources of the Bay and consist of providing area and enhancement resulting in characteristics and values similar to the characteristics and values adversely affected;

(2) That the mitigation would be at the fill project site, or if the Commission determines that on-site mitigation is not feasible, as close as possible;

(3) That the mitigation measures would be carefully planned, reviewed, and approved by or on behalf of the Commission, and subject to reasonable controls to ensure success, permanence, and long-term maintenance;

(4) That the mitigation would, to the extent possible, be provided concurrently with those parts of

the project causing adverse impacts; and

(5) That the mitigation measures are coordinated with all affected local, state, and federal agencies having jurisdiction or mitigation expertise to ensure, to the maximum practicable extent, a single mitigation program that satisfies the policies of all the affected agencies.

If more than one mitigation program is proposed that satisfies all five factors above, the Commission should consider the cost of the alternatives in determining the appropriate program.

To encourage cost effective and comprehensive mitigation programs, the Commission should extend credit for certain fill removal and encourage land banking provided that any credit or land bank is recognized pursuant to written agreement executed by the Commission. In considering credit or land bank agreements, the Commission should assure that the five factors listed above will be met.

2. **Permit Decisions.** If a permit application meets the standards listed above, a permit should be granted. If the proposal does not meet these standards, a permit should not be issued. In some cases, however, a permit could be conditionally approved subject to the applicant's later meeting clearly-specified requirements relating to one or more of the eight standards above. In other cases, an applicant might be able to change his or her proposal to conform to the Bay Plan policies, and he or she could then reapply after 90 days have elapsed since the date the original permit application was denied.

August 7, 1992

To: All Commissioners, Alternates, and Interested Parties
From: Alan R. Pendleton, Executive Director
Subject: **Bay Plan Amendment No. 3-91: San Francisco Bay Plan
Dredging Findings and Policies**
(For Information Only)

On May 21, 1992, the Commission amended the *San Francisco Bay Plan* dredging findings and policies and on July 13, 1992 the federal Office of Ocean and Coastal Resource Management (OCRM) concurred that the amendment is routine program implementation of the Commission's coastal management program for the San Francisco Bay segment of the California coastal zone. The amended *Bay Plan* dredging findings and policies are now in effect and are set forth below.

San Francisco Bay Plan Dredging

Findings

- a. Much of the Bay bottom is shallow. It averages 20 feet in depth, and the bottom is covered with accumulated sediment—silt, sand, and clay sediment is carried into the Bay annually in tributary waterway flows, most of it settling to the Bay bottom. In addition, over 100 million cubic yards of sediment—inflowing and resuspended—lodges in harbors and navigable channels from which it must be dredged at considerable cost.
- b. Dredging consists of excavating or extracting materials from the Bay. Dredging is often necessary to provide and maintain safe navigation channels and harbors for port facilities, water-related industries, and recreational boating, and for flood control channels.
- c. Past and present waste disposal practices have resulted in the introduction of pollutants into the Bay, some of which have degraded Bay sediments. These pollutants are not distributed evenly in the Bay and localized areas are highly contaminated. Dredging and subsequent aquatic disposal of contaminated sediments in the Bay can resuspend and redistribute pollutants in the water column, making them accessible to Bay organisms and result in possible adverse impacts on natural resources of the Bay.
- d. Material dredged from the Bay has historically been disposed of aquatically in the Bay. In more recent times, most aquatic disposal has occurred at one of four Bay U.S. Army Corps of Engineers designated disposal sites where the material is expected to disperse and the maximum amount would be carried out the Golden Gate on the Ebb tides and cause the least environmental impact as possible. These sites are: (1) off Alcatraz Island; (2) in San Pablo Bay; (3) in Carquinez Strait; and (4) in the Suisun Bay Channel. But even at the site nearest the ocean, off Alcatraz Island, less than half of the disposed material is carried out to sea by the tides.
- e. Capacity at the Alcatraz Island disposal site is limited because over years of use a large mound of material has formed which, unless future disposal is properly managed, may adversely affect water circulation and Bay aquatic life, and pose a hazard to maritime navigation.

- f. Alternate locations to Bay aquatic disposal include non-tidal upland and ocean sites. Only small amounts of material have been disposed of in non-tidal sites historically. Additional non-tidal sites with increased capacity should be available for dredged material disposal projects in early 1993, and ocean disposal sites are expected to be available for use in early 1994. Some non-tidal upland sites may be categorized as waters of the United States pursuant to federal law.
- g. Certain dredged material can be used beneficially rather than treated as a waste. The material can be used to bolster levees and dikes, create and restore tidal marshes and managed wetlands, cover and seal sanitary landfills, and as fill in construction projects.
- h. Dredged material disposed of at sea could return to the Bay with tidal currents or could cause damage to marine organisms or beaches sites. These conditions are capable of being analyzed prior to disposal at sea.
- i. The Regional Water Quality Control Board and the Environmental Protection Agency are responsible for determining appropriate dredged material pollutant testing and discharge standards and for assuring that dredging and the disposal of dredged materials are consistent with the maintenance of Bay water quality. The U.S. Environmental Protection Agency and the U.S. Army Corps of Engineers have joint federal responsibility for regulating ocean, Bay, and wetland disposal.
- j. The Long Term Management Strategy (LTMS), initiated by the U.S. Army Corps of Engineers in 1991, is a multiple federal and state agency initiative to study comprehensively Bay dredging issues and prepare by 1995, a long-range Bay dredging and dredged material disposal management plan and implementation program. When completed, the LTMS is expected to provide the basis for uniform federal and state dredged material disposal policies and regulations.
- k. Underground fresh water supplies are an important supplement to surface water now brought into the Bay Area by aqueduct from mountain reservoirs. Deep dredging of Bay mud, or excavation for tunnels or bridge piers, could strip the "strip" from the top of a fresh water reservoir under the Bay, allowing the salt water to contaminate the fresh water, or allowing the fresh water (if artesian) to escape in large quantities and thus cause land to sink. The precise location of ground water reservoirs under the Bay is not yet well known, however.

Policies

1. Dredging should be authorized when the Commission can find (a) the applicant has demonstrated that the dredging is needed to serve a water-oriented use or other important public purpose, (b) the materials to be dredged meet the water quality requirements of the San Francisco Bay Regional Water Quality Control Board, (c) important fisheries and Bay natural resources would be protected, and (d) the materials would be disposed of in accordance with Policy 2.
2. Disposal of dredged materials should be encouraged in non-tidal areas where the materials can be used beneficially, or in the ocean. Disposal in tidal areas of the Bay should be authorized when the Commission can find that: (a) the applicant has demonstrated that non-tidal and ocean disposal is infeasible; because there are no alternate sites available or likely to be available for use in a reasonable period, or the cost of disposal at alternate sites is prohibitively expensive; (b) disposal would be at a site designated by the Commission; (c) the quality and volume of the material to be disposed is consistent with the advice of the San Francisco Bay Regional Water Quality Control Board; and (d) the period of disposal is consistent with the advice of the Department of Fish and Game and the National Marine Fisheries Service.
3. When the annual amount of dredged material proposed to be disposed in tidal areas of the Bay exceeds the disposal volume targets established by the Commission, in determining which projects to authorize, the Commission shall be guided by all relevant factors concerning the pro-

posed projects, including, but not limited to, need for the dredging and the dredging project, regional economic impact, environmental impact, and other regional effects of the project, and the economic feasibility of using alternate disposal sites.

4. To ensure adequate capacity for necessary Bay dredging projects and to protect Bay natural resources, acceptable non-tidal disposal sites should be secured and ocean disposal sites designated. Further, disposal projects should maximize use of dredged material as a resource, such as creating, enhancing, or restoring tidal and managed wetlands, creating and maintaining levees and dikes, providing cover and sealing material for sanitary landfills, and filling at approved construction projects.

5. Once non-tidal or ocean disposal sites have been secured or designated, and prior to completion of the LTMS, the maximum feasible amount of dredged material should be disposed of at non-tidal sites or in the ocean. Until non-tidal upland disposal sites are secured and ocean disposal sites designated, aquatic disposal in the Bay should be authorized at sites designated by the U.S. Army Corps of Engineers and the Commission. Dredged materials disposed of aquatically in the Bay, particularly at the Alcatraz Island disposal site, should be carefully managed to ensure that the amount and timing of disposal does not create navigational hazards, adversely affect Bay currents or natural resources of the Bay, or foreclose the use of the site by projects critical to the economy of the Bay Area.

6. All proposed channels should be carefully designed so as not to undermine the stability of any adjacent dikes, fills or fish and wildlife habitats.

7. The Commission should encourage increased efforts by soil conservation districts and public works agencies in the 50,000-square-mile Bay tributary area to continuously reduce soil erosion as much as possible.

8. To protect underground fresh water reservoirs (aquifers), (a) all proposals for dredging or construction of work that could penetrate the mud "cover" should be reviewed by the Regional Water Quality Control Board and the State Department of Water Resources, and (b) dredging or construction work should not be permitted that might reasonably be expected to damage an underground water reservoir. Applicants for permission to dredge should be required to provide additional data on ground water conditions in the area of construction to the extent necessary and reasonable in relation to the proposed project.

9. Interested agencies and parties are encouraged to explore and find funding solutions to the additional costs incurred by transporting dredged materials to non-tidal upland and ocean disposal sites, either by general funds contributed by ports and other relevant parties, dredging applicants or other wise.

10. Dredged materials should only be used to create artificial islands in the Bay if competent studies demonstrate that these fill islands would have no harmful effect on Bay natural resources.

11. The Commission should encourage, sponsor and participate in the LTMS and other initiatives conducting research on Bay sediment movement, the effects of dredging and disposal on Bay natural resources, alternatives to Bay aquatic disposal, and funding additional costs of transporting dredged materials to non-tidal upland and ocean disposal sites.

MEMORANDUM

To : Mike Chiriatti
State Clearinghouse
1400 Tenth Street
Sacramento, CA 95814

Date: May 2, 1994

Roger Golden
Environmental Health
U.S. Army Corps of Engineers
211 Main Street
San Francisco, CA 94105-1905

Jody Zaitlin
Environmental Department
Port of Oakland
530 Water Street
Oakland, CA 94607

From :


Vincent Paul, Associate WMS
Permitting and Enforcement Division
CALIFORNIA INTEGRATED WASTE MANAGEMENT BOARD

Subject: SCH #91073031 : Draft Supplemental Environmental
Impact Report Environmental Impact Statement (SEIR/S)
for the Oakland Harbor Deep-Draft Navigation
Improvements, Alameda County.

PROJECT DESCRIPTION

The Port of Oakland, acting as lead agency under the California Environmental Quality Act (CEQA), and the United States Army Corps of Engineers, acting as lead agency under the National Environmental Policy Act (NEPA), have jointly undertaken the preparation of a SEIR/S for the Oakland Harbor Deep-Draft Navigation Improvement. The proposed project consists of deepening the navigation channels in the Oakland Outer and Inner Harbors from -35 feet (Outer Harbor, parts of Inner Harbor) or -38 feet (most of Inner Harbor) mean lower low water (MLLW) to a depth of -42 feet MLLW. The project will dredge approximately 5.8 million cubic yards of sediment materials. Additional components of the project include:

- * Widening of the Inner and Outer Harbor Channels in several locations to permit optimum utility of the channels;
- * Construction of a new turning basin in the Inner Harbor;
- * Widening of the existing turning area in the Outer Harbor;

- * Deepening of berthing areas in the Inner and Outer Harbors which are not presently maintained at -42 feet MLLW; and,
- * Relocation of existing submarine utilities and the removal of existing pier structures in the vicinity of the proposed construction work.

The disposal options currently under consideration (and listed in previous Notices) are:

- * Disposal at an ocean site designated by the Environmental Protection Agency for that purpose under Section 102 of the Marine Protection, Research, and Sanctuaries Act;
- * Confined Aquatic disposal at a Borrow Area in San Francisco Bay, offshore of the City of Alameda in Alameda County;
- * The Alcatraz disposal site in San Francisco County;
- * Wetland restoration at the proposed Sonoma Baylands on land owned by the Sonoma Land Trust near San Pablo Bay near the mouth of the Petaluma River in Sonoma County;
- * Fill for recreational or other purposes on Port property at the site currently occupied by the Lew F. Galbraith golf course leased and operated by the City of Oakland;
- * Drying of the material on the "Leonard Ranch" property in Sonoma County owned by the Sonoma Land Trust near San Pablo Bay, with ultimate use of the material at nearby landfills for capping or cover material; and,
- * Fill for disposal and wetland restoration on Solano County on land owned by the Catellus Corporation as part of the proposed Montezuma Wetlands project (SCH# 91113031).
- * Drying of up to 100,000 cubic yards of sediments that are unsuitable for unconfined aquatic disposal at the Ninth Avenue Terminal at the Port of Oakland. Once dry, the sediments will be transported off-site by truck or train to a landfill for confinement or use as daily cover.

Twenty-three dredged material disposal sites were initially considered. These were subsequently narrowed to eight sites, including aquatic sites (an ocean and in-Bay sites). The disposal sites analyzed in this document are listed as follows:

Ocean Section 102 site, Alcatraz Disposal site, Bay Farm Borrow Area, Leonard Ranch, Redwood Landfill, Sonoma Baylands, Galbraith Golf Course, Ninth Avenue Terminal, West Contra Costa Landfill, Vasco Road Sanitary Landfill, East Carbon Landfill (UTAH), and the Montezuma Wetlands.

California Integrated Waste Management Board (Board) staff have reviewed the SEIS/R and offer the following comments:

BOARD REGULATORY OVERSIGHT

The Board operates in cooperation with local governments to assure protection of the public health and environment from potentially detrimental effects of solid waste management. The Board notes that some of the proposed disposal alternatives in the SEIR/S involving land disposal rather than ocean disposal may require the Board to concur in the issuance or revision of a Solid Waste Facilities Permit for disposal of dredge wastes to land. Specifically, the areas which would require direct Board involvement are:

- * Upland disposal of dredge materials;
- * Landfilling involving non-hazardous dredge waste previously deposited in the San Francisco Bay;
- * Use of dredge material for landfill cover (daily and/or final);
- * Rehabilitation of levees and drainage facilities surrounding Class III landfills; and,
- * Use of dredge material for reclamation at sites atop an inactive landfill.

The Board concurs in the issuance of a Solid Waste Facility Permit (SWFP) with Local Enforcement Agencies (LEA) to assure that a landfill is operating in a manner consistent with state law and local ordinances.

GENERAL COMMENTS

California Environmental Quality Act (CEQA) compliance is required for the establishment, expansion, or change in operation(s) of a solid waste facility, and the issuance or revision of a SWFP.

Board staff review of the SEIR/S was conducted in accordance with the intent of CEQA. In order to assist the lead agency during the CEQA process, Board staff submit these comments to identify potential impacts from the proposed project that can be mitigated, after a determination that proposed mitigation measures are feasible and reduce significant impacts to a level of insignificance.

In order for Board staff to ascertain that the SEIR/S is adequate for our use if the permitting process occurs, the Final SEIR/S must describe mitigation measures in sufficient detail which address potential environmental impacts must be identified clearly and offer "mitigating measures, if any, included in the project to avoid potentially significant effects" [CEQA Guidelines (Article 6, Section 15071e)].

Mitigation measures which are conceptual in nature that offer speculative interpretation of the intent of CEQA are not recognized in accordance with the definition of a mitigation measure. Mitigation measures are required to "substantially lessen or avoid" significant adverse environmental impacts. Mitigation measures should include "substantial evidence" to justify the intent of the actual mitigation measures in question. According to CEQA Guidelines, Section 15384, states:

"Substantial evidence" means enough relevant information and reasonable inferences from this information that a fair argument can be made to support a conclusion, even though other conclusions might also be reached. Whether a fair argument can be made is to be determined by the entire record.

SOLID WASTE MANAGEMENT ISSUES

In order to help decision-makers identify potential impacts from construction projects and assess whether project-related impacts are significant, those decision-makers should also assess whether significant impacts could occur at local landfills from the proposed project. Whenever a unique and innovative technical waste management project is proposed, the scope of the project often requires a lead agency to provide sufficient information which identifies potential impacts upon those environs affected directly or indirectly from this project. Section 1.0 of the SEIR/S presented an informative history of the Long-Term Management Strategy as it pertains to the proposed project.

Board staff suggest that future environmental documentation associated with this SEIR/S include "substantial evidence". Such information could support arguments in favor of the proposed project, though conceptual in nature, and merit recognition as to the intent of this SEIR/S. Subsequent controversy may be lessened for the proposed project if "substantial evidence" is provided in future documentation and justifies that the project is complete, adequate, and augments current vs. future feasible mitigation measures, where needed, thus addressing impacts for long-term CEQA compliance.

Board staff offer these suggestions in light of recent legislation affecting CEQA, specifically Assembly Bill (AB) 1888. AB 1888 amended and added language to Division 13 of the Public Resources Code.

The SEIR/S could be comparable to the definition of a Master EIR in AB 1888, since the proposed project consists of smaller individual projects which will be carried out in phases. Supplemental environmental documentation arising from this proposed project would be prepared with the intent of Chapter 4.5 regarding CEQA statute. To summarize, Chapter 4.5 is intended to allow the lead agency to focus upon those issues that are ripe for decision at each level of environmental review, or to exclude duplicative analysis of environmental effects examined in previous environmental impact reports.

SECTION 4.0 ENVIRONMENTAL EFFECTS AND MITIGATION MEASURES

Any newly proposed procedures for reducing sediment testing requirements not discussed in the SEIR/S would require additional interagency review. The use or disposal of dredging material at a Class III landfill requires that the material be deemed non-hazardous in accordance with the provisions of the California Code of Regulations (CCR) Title 23, Chapter 15. Any newly proposed sediment testing requirements should provide information necessary to make this determination.

Dredge material which may be disposed of at the Vasco Road Landfill, West Contra Costa Landfill, or the Redwood Landfill, could significantly impact the permitted maximum daily tonnage capacities at either of the three landfills. These landfills operate in accordance with a SWFP which clearly states the maximum tonnage shall not be exceeded. In order to avoid any violations from the project, the operators of the aforementioned landfills may be required to file for a revision to their SWFPs with the LEA and the Board.

REDWOOD LANDFILL DISPOSAL OPTION

Page 4.2-41 of the SEIR/S states:

Redwood Landfill would require additional leaching tests for Oakland Inner and Outer Harbor and Turning Basin Sediments. Because such tests have not been completed, it is unclear if Port of Oakland sediments would be acceptable for levee restoration or daily cover. If this disposal option is selected, testing for acceptability of sediments for Redwood will be accomplished pending resolution of testing requirements and acceptance criteria between Redwood Landfill and the RWQCB.

If a landfill were to become a hazard and violate any portion of a SWFP, the Board would then take action with the LEA to correct the violation. The Board and LEA jointly monitor disposal operations at landfills to protect public health and safety and the environment from potential hazards associated with solid waste disposal. Board staff look forward to continued correspondence with the lead agency regarding this testing.

- 3 | The Marin County Environmental Health Department, Solid Waste LEA for the Redwood Landfill should also be provided this information as it is available from the RWQCB.

ACTIVITIES AT CLOSED LANDFILLS

- 4 | In order to help decision-makers identify potential impacts from construction projects and assess whether project-related impacts are significant, those decision-makers should also assess whether significant impacts could occur at local landfills from the proposed project.

Throughout the SEIR/S, one of the options for dredge management involved dredge activities for reuse at the Lew Galbraith Golf Course. This site was once a landfill, which closed sometime after 1965. Whenever a Class III or previously designated Class II landfill ceased acceptance of non-hazardous solid wastes, the land use for that area is anticipated to remain idle and deemed compatible with local land use zoning requirements. Though idle, a landfill generates detectable emissions, such as methane gas, odors, and leachate up to 30 years after final receipt of waste. In some circumstances, this period may extend beyond 30 years. Common landfill gases detected at closed landfills include methane (CH₄) and hydrogen sulfide (H₂S).

- 5 | Since the Deep Draft project includes post-closure reuse of a golf course which has been sited atop a landfill, the Final SEIR/S should address regulations that govern activities at inactive solid waste facilities in accordance with the California 14 CCR 7.8. Differential settlement may adversely affect the dredge materials and any pre-existing landfill gas control or leachate collection systems for the facility.

Board staff offer assistance to the lead agency and have attached a copy of regulations associated with closed solid waste facilities contained in 14 CCR 7.8. These regulations apply to new post closure activities which may jeopardize previously closed sites and impact the integrity of a site or pose a potential threat to public health and safety or the environment (14 CCR 17760 (b)(2)). A copy of these regulations are attached.

- 6 | Although dredge management at the Galbraith site would include inspections by qualified officials, Board staff suggest that the lead agency consider contacting the Alameda County LEA for the site. The LEA may wish to inspect the site and should be made aware of any potential health hazards associated with the project site.

CONCLUSION

Board staff are aware of the difficulties associated with the implementation of this complex project which involves various state and federal permitting agencies. Permitting procedures are designed to provide adequate time for agency review of project activities and analysis of potential impacts. Any proposed streamlining of permitting procedures should not jeopardize requirements necessary to complete environmental review under CEQA. Time periods should also be adequate for the development of environmentally sound mitigation measures prior to project implementation.

Concerns also arise regarding the lengthening of permit periods. The Final SEIR/S should be specific regarding the types of permits under consideration for revision. Additionally, permit periods should only be extended provided that interim monitoring periods are adequate to detect contamination levels, and that contingency plans to remedy the contamination sources exist prior to extending the permitting period. The Final SEIR/S should identify technically feasible, economically prudent and environmentally acceptable long range solutions for the Bay region's dredging and disposal options. The Final SEIR/S may serve as a model document for dredge waste management. 7

Board staff have identified and documented specific concerns with the proposed project and look forward to reviewing the Final SEIR/S. Board staff recommend that the lead agency consider comments from additional responsible agencies and the LEA prior to certification of the Final SEIR/S for the proposed project. Board staff ask that adequate time for subsequent review of the Final SEIR/S be provided.

If you have any questions regarding these comments, please contact me at (916) 255-2370.

cc: William Raynolds
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Regional Water Quality Control Board
San Francisco Bay Region
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Marin County
Department of Environmental Health Services
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San Rafael, CA 94903

Bay Area Air Quality Management District
939 Ellis Street
San Francisco, CA 94109

file 91073031.01

DEPARTMENT OF FISH AND GAME

1416 NINTH STREET
P.O. BOX 944209
SACRAMENTO, CA 94244-2090



April 18, 1994

Lieutenant Colonel Leonard E. Cardoza
District Engineer
San Francisco District
U.S. Army Corps of Engineers
211 Main Street
San Francisco, California 94105-1905

Dear Colonel Cardoza:

The Department of Fish and Game (DFG) has reviewed the Draft Supplemental Environmental Impact Report/Environmental Impact Statement (DSEIR/EIS) for Oakland Harbor deep-draft navigation improvements prepared by the U.S. Army Corps of Engineers and Port of Oakland. The DSEIR/EIS describes a proposal to deepen existing navigation channels and selected berths in Outer and Inner Oakland Harbor to -42 feet Mean Lower Low Water (MLLW), construct a new turning basin within the Inner Harbor, relocate submarine utilities, and remove existing pier structures in the vicinity of the project site. Approximately 5.8 million cubic yards (cys) of sediment are proposed to be removed from the channels and berthing areas. Evaluation of an array of disposal alternatives, including identification of the preferred alternative, is the principal focus of the DSEIR/EIS.

The DFG has been actively involved in the Corps' and the Port's effort to carry out these improvements since issuance of the 1987 Draft Design Memorandum and SEIS, which initially contained a proposal to accommodate the project's dredged materials by predredging the Alcatraz disposal site (SF-11) and placing Alcatraz sediments at a nearshore ocean location. The DFG's primary interest in this and other water development proposals is, as always, the protection of fish and wildlife resources and their habitats. Throughout the lengthy permitting and approval process for the navigation improvement project, the quality of Oakland Harbor sediments and the availability of environmentally sound, yet economically feasible, disposal alternatives have been the principal issues of discussion and study. The Port's well-documented need to provide access and facilities for a new generation of container vessels was instrumental in the formation of the multiagency Long Term Management Strategy (LTMS) program. The LTMS process has given the San Francisco Bay region improved sediment quality guidance for SF-11 and created several new disposal opportunities which, in part, form a basis for this DSEIR/EIS.

in part, form a basis for this DSEIR/EIS.
Lieutenant Colonel Leonard E. Cardoza
April 18, 1994
Page 2

The DFG wishes to compliment the Corps and the Port for their exhaustive efforts to resolve the many difficult, and occasionally contentious, issues surrounding this proposal. As a result of our review of the DSEIR/EIS and incorporating previous environmental documents, the DFG concludes that we are in complete concurrence with the Recommended Plan (Alternative B2) which: 1) emphasizes the beneficial use of approximately 2.6 million cys of dredged materials to help create nearly 350 acres of tidal marsh at Sonoma Baylands, following Regional Water Quality Control Board sediment guidelines; 2) places approximately 2.0 million cys of clean sediments at the U.S. Environmental Protection Agency's (EPA) deep-ocean disposal site, scheduled for designation in June 1994; 3) puts approximately 1.0 million cys of material, categorized by EPA as chemically unsuitable for ocean disposal, in a confined facility to be developed on the Port's Galbraith Golf Course; and 4) restricts approximately 100,000 cys of the most highly contaminated sediments to an appropriate upland disposal site, following dewatering at the Port's Ninth Street Terminal.

In general, the DFG finds that the DSEIR/EIS has adequately characterized the biotic resources and potential adverse impacts to these resources within Oakland Harbor and at the various alternative disposal sites as well as provided appropriate measures to avoid impacts to sensitive species. However, we wish to provide the Corps and the Port with the following comments and recommendations relative to specific elements of the DSEIR/EIS:

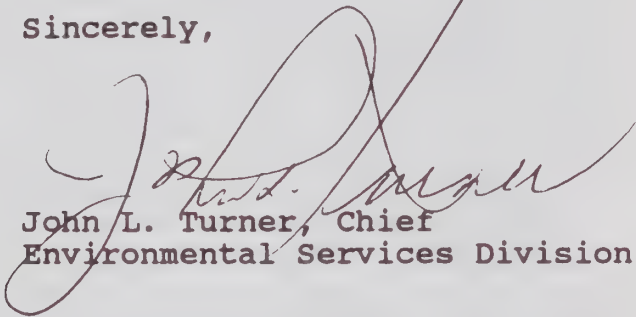
- 2 | 1. Oakland Harbor has provided a large measure of the spawning substrate for the commercially valuable Pacific herring resource in recent years. Details regarding efforts to avoid dredging in the Harbor's channel and berthing areas during the Pacific herring spawning season need to be clarified and further developed in cooperation with personnel from our agency.
- 3 | 2. Elimination of the Alcatraz disposal site alternative can be further justified by the potential effects upon recreational fishing activity and modification of adjacent bottom habitats in central San Francisco Bay from disposal of such a large volume of dredged material. The DFG continues to have substantial concerns regarding in-Bay disposal as it relates to fish and wildlife, and we are pleased that it is not being considered in the DSEIR/EIS as a viable alternative for this project.

3. Characterization of the Bay Farm Island Borrow Area in the DSEIR/EIS continues to demonstrate that insufficient information is available to determine if its proposed use as a confined aquatic disposal site for contaminated sediments is appropriate or that disposal there will not be a threat to valuable habitats nearby such as eel grass beds and least tern foraging areas. The DFG will continue to participate in the evaluation of this option should it become formally incorporated into the LTMS process. 4
4. It would have been more helpful to DFG's assessment of the deep-ocean alternative if the DSEIR/EIS had presented additional information on the success of the U.S. Navy's use of that site in 1993 for their disposal of 1.2 million cys of sediment from Naval Air Station Alameda and Naval Supply Center Oakland. That disposal was permitted under Section 103 of the Marine Protection, Research, and Sanctuaries Act, and monitoring of the Navy's disposal activities had been a principal component of that authorization. Nevertheless, the DFG believes that the deep-ocean site selected by EPA during their site designation process was the most environmentally acceptable of those considered and pending the eventual approval of a comprehensive site management and monitoring plan, DFG continues to support its proposed use for clean, chemically suitable sediments. 5
5. We reiterate our longstanding support of the reuse of dredged material to create tidal marsh in areas of diked palustrine farmland, particularly the Sonoma Baylands alternative, as well as the Montezuma wetlands project, discussed in the DSEIR/EIS. The DFG has participated in the planning of these Baylands projects and our overall view is that they will result in significant benefits to fish and wildlife in San Francisco Bay. Specifically, the Sonoma Baylands project will provide improved habitat values for shorebirds and waterfowl, substantial increases in wetland acreage, and additional critical habitat for State- and federally-listed endangered, threatened, and candidate species. The DFG recommends that prior to or at the time that the Baylands dikes are breached, the outer levee be graded down to intertidal mean high water (MHW) elevations to eliminate denning habitat for red fox. 6
6. Prior to grading activities at the Galbraith sites, burrowing owl surveys should be conducted to determine the presence of breeding birds on the site. If nests are present, they should be avoided during the breeding season. Outside of the breeding season burrows can be removed after it is demonstrated that they are not in use. 7

Lieutenant Colonel Leonard E. Cardoza
April 18, 1994
Page 4

In summary, the DFG strongly endorses the DSEIR/EIS' Recommended Plan which maximizes wetland restoration, followed by ocean disposal of clean sediments and upland disposal of unsuitable materials. Thank you for the opportunity to review this document and provide our comments and recommendations. As always, DFG personnel are available to discuss our views in greater detail. To arrange for discussion, please contact Mr. Robert N. Tasto, Environmental Specialist, California Department of Fish and Game, Marine Resources Laboratory, 411 Burgess Drive, Menlo Park, California 94025, telephone (415) 688-6360.

Sincerely,



John L. Turner, Chief
Environmental Services Division

cc: Mr. James McGrath
Port of Oakland
Oakland, California

Honorable Douglas P. Wheeler
Resources Agency
Sacramento, California

Mr. Mark Del Piero
State Water Resources Control Board
Sacramento, California

Mr. Robert N. Tasto
Department of Fish and Game
Menlo Park, California



GOVERNOR'S OFFICE OF PLANNING AND RESEARCH

1400 TENTH STREET
SACRAMENTO, CA 95814

April 25, 1994

JODY ZAITLIN
PORT OF OAKLAND
530 WATER STREET
OAKLAND, CA 94607

Subject: DEEP-DRAFT NAVIGATION IMPROVEMENT PROJECT SCH #: 91073031

Dear JODY ZAITLIN:

The State Clearinghouse submitted the above named environmental document to selected state agencies for review. The review period is closed and none of the state agencies have comments. This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act.

Please call at (916) 445-0613 if you have any questions regarding the environmental review process. When contacting the Clearinghouse in this matter, please use the eight-digit State Clearinghouse number so that we may respond promptly.

Sincerely,

A handwritten signature in dark ink, appearing to read 'Michael Chiriatti, Jr.', with a stylized flourish at the end.

Michael Chiriatti, Jr.
Chief, State Clearinghouse

Notice of Completion and Environmental Document Transmittal Form

Mail to: State Clearinghouse, 1400 Tenth Street, Sacramento, CA 95814 — 916/445-0613

See NOTE below
SCH # 91073031

1. Project Title Port of Oakland

2. Lead Agency Port of Oakland

3. Contact Person Jody Zaitlin

3a. Street Address 530 Water St.

3b. City Oakland

3c. County Alameda

3d. Zip 94607

3e. Phone 510 272-1179

Project Location — Specific Oakland Harbor / Oakland / Pacific Ocean / Sonoma Co.

4. County Alameda / Sonoma

4a. City/Community Oakland

4b. Assessor's Parcel No. _____

4c. Section _____ Twp. _____ Range _____

5a. Cross Streets _____

5b. For Rural, Nearest Community Novato

6. Within 2 miles: a. State Hwy # 880

b. Airports Oakland

c. Railways UP & SP

d. Waterways San Francisco Bay

7. Document Type

CEQA: 01 ☐ NOP 05 ☒ Supplemental Subsequent EIR/NEPA: 09 ☐ NOI OTHER: 13 ☒ Joint Document

02 ☐ Early Cons 10 ☐ FONSI 14 ☐ Final Document

03 ☐ Neg Dec 11 ☐ Draft EIS 15 ☐ Other

04 ☐ Draft EIR 12 ☐ EA

06 ☐ Prior SCH No. 82081523

07 ☐ NOE 08 ☐ NOD

8. Local Action Type

01 ☐ General Plan Update 05 ☐ Annexation 09 ☐ Rezone 12 ☐ Water

02 ☐ New Element 06 ☐ Specific Plan 10 ☐ Land Division (Subdivision, Parcel Map, Tract Map, etc.) 13 ☐ Cancel Ag

03 ☐ General Plan Amendment 07 ☐ Community Plan 11 ☐ Use Permit 14 ☐ Other

04 ☐ Master Plan 08 ☐ Redevelopment

9. Development Type

01 ☐ Residential: Units _____ Acres _____ 07 ☐ Mining: Mineral _____

02 ☐ Office: Sq. ft. _____ Acres _____ Employees _____ 08 ☐ Power: Type _____ Watts _____

03 ☐ Shopping/Commercial: Sq. ft. _____ Acres _____ Employees _____ 09 ☐ Waste Treatment: Type _____

04 ☐ Industrial: Sq. ft. _____ Acres _____ Employees _____ 10 ☐ OCS Related

05 ☐ Water Facilities: MGD _____ 11 ☐ Other: _____

06 ☒ Transportation: Type Deep Draft Navigation

10. Total Acres _____ 11. Total Jobs Created _____

12. Project Issues Discussed in Document

01 ☒ Aesthetic/Visual 09 ☒ Geology/Seismic 17 ☐ Social 25 ☒ Wetland/Riparian

02 ☒ Agricultural Land 10 ☐ Jobs/Housing Balance 18 ☐ Soil Erosion 26 ☒ Wildlife

03 ☒ Air Quality 11 ☐ Miners 19 ☐ Solid Waste 27 ☒ Growth Inducing

04 ☒ Archaeological/Historical 12 ☐ Noise 20 ☐ Toxic/Hazardous 28 ☐ Incompatible Land Use

05 ☒ Coastal Zone 13 ☐ Public Services 21 ☒ Traffic/Circulation 29 ☐ Cumulative Effects

06 ☒ Economic 14 ☐ Schools 22 ☒ Vegetation 30 ☐ Other _____

07 ☐ Fire Hazard 15 ☐ Sewer Systems 23 ☒ Water Quality

08 ☐ Flooding/Drainage 16 ☐ Sewer Capacity 24 ☐ Water Supply

13. Funding (approx.): Federal \$ 100,000,000 State \$ 5,000,000 Total \$ 105,000,000

14. Present Land Use and Zoning Federal Navigation channel

15. Project Description Deepening of the Oakland Inner and Outer Harbor channels from -38 ft. to -42 ft. Approximately 5.8 million cubic yards will be disposed at several locations: Pacific ocean, Sonoma Bay, Golden Gate, and a landfill.

16. Signature of Lead Agency Representative James McQuinn Date 2-14-94

NOTE: Clearinghouse will assign identification numbers for all new projects. If a SCH number already exists for a project (e.g. from a Notice of Preparation or previous draft document) please fill it in.

Form Revised 4/86 — Replaces CA189 Mark Distribution on Reverse Appendix C — 1 of 3

CLEARINGHOUSE CONTACT: MIKE CHIRIATTI
(916) 445-0613

STATE REVIEW BEGAN: 3-10-94

DEPT REV TO AGENCY: 4-18

AGENCY REV TO SCH: 4-22

SCH COMPLIANCE: 4-25

CMT SMT

☒ Resources

☒ Coastal Comm

☒ Conservation

☒ Fish & Game 3

☒ Parks & Rec/OHP

☒ BCDC

☒ CHP

☒ Caltrans #4

CMT SMT

State/Consumer Svcs

☒ SWRCB:--Wtr Quality

☒ Reg. WQCB # 2

☒ State Lands Comm

PLEASE NOTE SCH NUMBER ON ALL COMMENTS

PLEASE FORWARD LATE COMMENTS DIRECTLY
TO THE LEAD AGENCY ONLY

AQMD/APCD: 2 (Resources: 3, 12)

("S" = sent by lead / "*" = sent by SCH)

STATE LANDS COMMISSION

LEO T. MCCARTHY, *Lieutenant Governor*
GRAY DAVIS, *Controller*
THOMAS W. HAYES, *Director of Finance*

EXECUTIVE OFFICE
1807 - 13th Street
Sacramento, CA 95814

CHARLES WARREN
Executive Officer

April 22, 1994

Mr. Roger Golden
U. S. Army Corps of Engineers
Engineering Department
21 Main Street
San Francisco, CA 94105-1905

Dear Mr. Golden:

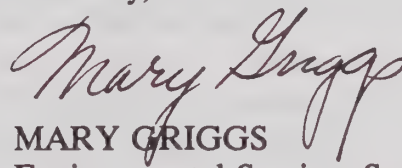
Subject: Draft Supplemental Environmental Impact Statement and Environmental Impact Report (EIS/EIR) for the Oakland Harbor, Deep Draft Navigation Improvements, Alameda County (SCH 91073031)

This letter is in response to your request for comments to the above-described Draft Supplemental EIS/EIR. Commission staff have previously provided comments to the Supplemental Notice of Intent by letter dated February 25, 1993 (enclosed). We continue to emphasize the need for this project to be conducted in conjunction with the Long Term Management Strategy (LTMS) process, as mentioned in Page 2-3 of our February 25, 1993 letter.

1

Thank you for the opportunity to comment. If you have any questions, please contact Elizabeth Patterson at 916-327-4035.

Sincerely,



MARY GRIGGS
Environmental Services Section
Division of Environmental
Planning and Management

Enclosure

cc: Robert Hight
James T. Burroughs
James F. Trout
Jane Sekelsky
Elizabeth Patterson
Linda Martinez
Dave Plummer
OPR

STATE LANDS COMMISSION

LEO T. McCARTHY, *Lieutenant Governor*
GRAY DAVIS, *Controller*
THOMAS W. HAYES, *Director of Finance*

EXECUTIVE OFFICE
1807 - 13th Street
Sacramento, CA 95814

CHARLES WARREN
Executive Officer

February 25, 1993

File Ref.: W 24579

Ms. Carol Whiteside
State Projects Coordinator
The Resources Agency
1416 Ninth Street, Room 449
Sacramento, California 95814

Mr. Roger Golden
U.S. Army Corps of Engineers
Engineering Department
21 Main Street
San Francisco, California 94105-1905

Dear Ms. Whiteside and Mr. Golden:

Subject: Supplemental Notice of Intent to Prepare a Draft Supplemental Environmental Impact Statement and Environmental Impact Report for the Oakland Harbor, Deep Draft Navigation Improvements, Alameda County (SCH 91073031)

This letter is in response to your request for comments to the above-described Supplemental Notice of Intent. Enclosed are our letters dated July 11, 1990, January 24, 1991, and July 24, 1991 responding to former Notices of Preparation for this project. These comments apply to the subject NOP and are incorporated herein by this reference. In addition, State Lands Commission (SLC) staff incorporates by reference the U.S. Environmental Protection Agency (EPA) comments to this Notice of Intent (NOI).

STATE LANDS COMMISSION JURISDICTION:

As indicated in our previous letters, the proposed dredging activities will be subject to SLC permit requirements pursuant to the Commission's authority to administer the State's mineral rights within the lands to be dredged. Please continue working with Linda Martinez, Public Land Manager, at 916-322-6375 regarding the application and permit process.

The following is a brief description of the State's sovereign interests in the two additional disposal options which are the subject of this NOI.

Ms. Carol Whiteside
Mr. Roger Golden
February 25, 1993
Page Two

Leonard Ranch: This site may involve existing or historic tidelands subject to the State-retained Public Trust Easement. Currently, the Commission does not require permits for uses over its Easement lands; however, this Easement remains the dominant interest in the property and the owner of the underlying fee may not put the lands to uses inconsistent with the public trust needs in the area. In addition, if dredging is proposed in the Petaluma Channel, a permit from the Commission would be required.

Montezuma
Wetland Project: Please refer to our response in our January 24, 1991 letter.

SCOPE OF ENVIRONMENTAL ANALYSIS:

The supplemental environmental document should discuss the relationship of the project to the Long Term Management Strategy (LTMS) process. As with the EPA's EIS for the proposed offshore disposal site, this discussion should include the overall dredging "budget" on an annual basis and over the fifty year planning period. The discussion should include a capacity analysis for three disposal options based on a matrix which depicts the status of potential disposal sites -- in-bay, ocean and upland --, comparative environmental risks (including comparison among baseline datum of ocean, bay and upland), comparative environmental benefits, comparative remedial capabilities and comparative permitting process.

The document should discuss and reflect the status of the LTMS process, the schedule of the LTMS plan and plan elements, the need for environmental review, and the structure of the programmatic EIS/EIR in order to reflect ongoing projects that may significantly affect the LTMS policies that will be developed. This requested discussion should be considered a structural discussion and should not attempt to anticipate LTMS policies or indeed the outcome of the programmatic EIS/EIR. The value of this discussion is to develop a method for applying future policy decisions to a specific project seeking approval.

Because project approval in a vacuum of policy could in fact dictate future policy, it is intended that policy issues be identified and that appropriate requirements be developed to ensure dredging and disposal projects are consistent with the future LTMS policies. Policy issues include the following:

Ms. Carol Whiteside
Mr. Roger Golden
February 25, 1993
Page Three

- * Standards for determining environmentally acceptable in-bay disposal. The LTMS process has identified the need for updated standards for in-bay testing protocol and standards. Recently adopted in-bay standards are intended to be revised by 1994 to reflect the same higher standard (relatively) for ocean disposal. Therefore, current environmentally acceptable determination will probably not be acceptable under higher standards. It is appropriate in an environmental document to discuss this since the environmental impact is independent from existing statutory or regulatory standards. Indeed, environmental review is useful to identify the gap between environmental impacts and existing standards.
- * Determining environmentally beneficial use. The environmental document should identify all "environmental beneficial uses" inclusive of restored tidal wetlands.
- * Confined material disposal need. The document should discuss the need and overall policy of confined material disposal. Any disposal site should be assessed for the cumulative impact of relying on a single site for this disposal. What are the threshold disposal amounts that limit in-bay disposal? In addition, confined disposal sites should be compared for remedial action. Remedial action would include ability to avoid environmental harm, degree of risk and cost. This discussion of confined materials disposal is a key link to determining "most economical disposal costs" as performed by the ACOE. Therefore, not only are potential environmental effects important, the mitigation and monitoring discussion is essential for the Corps' cost analysis. The mitigation program should be structured to meet USEPA requirements for remedial actions.

Thank you for the opportunity to comment. If you have any questions, please contact Elizabeth Patterson, Aquatic Resources Policy Manager, at 916-327-4035.

Sincerely,



MARY GRIGGS
Environmental Review Section
Division of Environmental
Planning and Management

Enclosures

cc: Charles Warren
James F. Trout
Jane Sekelsky
Dwight E. Sanders
Elizabeth Patterson
Linda Martinez
Dave Plummer
OPR

**STATE WATER RESOURCES CONTROL BOARD**

PAUL R. BONDERSON BUILDING
901 P STREET
P.O. BOX 100
SACRAMENTO, CALIFORNIA 95812-0100
(916) 657-0941
FAX: (916) 657-0932

5/2/94

Ms. Jody Zaitlin
Environmental Department
Port of Oakland
539 Water Street
Oakland, CA 94607

Dear Ms. Zaitlin:

REVIEW OF DRAFT SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT/
ENVIRONMENTAL IMPACT STATEMENT FOR OAKLAND HARBOR DEEP-DRAFT
NAVIGATION IMPROVEMENTS, STATE CLEARINGHOUSE NO. 91073031

We are hereby transmitting the comments prepared by the San Francisco Bay Regional Water Quality Control Board (Regional Board). The State Water Resources Control Board will work with the Regional Board and the Port of Oakland to resolve the remaining issues about this project.

If you have any questions, please call Mr. Ronald Bachman, of my staff, at (916) 657-2185, or you can reach me at (916) 657-0941.

Sincerely,

Walt Pettit
Executive Director

Enclosure

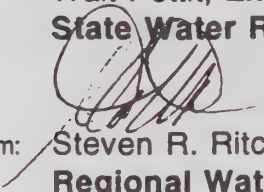
cc: Mike Kahoe, California Environmental Protection Agency
U.S. Army Corps of Engineers, San Francisco District

Internal

Memorandum

To: Walt Pettit, Executive Director
State Water Resources Control Board

Date: April 29, 1994
File No. 1535.05(TRG)

From:  Steven R. Ritchie, Executive Officer
Regional Water Quality Control Board
San Francisco Bay Region

Subject: Staff Comments on the Oakland Harbor Deep-Draft Navigation Improvements DSEIS/EIR

Regional Board staff have reviewed the draft Supplemental Environmental Impact Statement / Environmental Impact Report (DSEIS/EIR) on the Oakland Deepening project ("42-foot project") prepared by the U.S. Army Corps of Engineers (Corps) and the Port of Oakland (Port).

Introduction

The proposed project would result in the dredging and disposal of approximately 5.8 million cubic yards of sediment. The improvements consist of the dredging of port berths, a turning basin and ship channels in the Oakland Inner and Outer Harbors. The proposed project is anticipated to begin in December 1994 and last for between 24 to 27 months.

Disposal of dredge material has been controversial in the Bay Area because it affects the Estuary's biological resources and water quality due to (1) burial of organisms at the disposal site, (2) increase in suspended sediment in the water column, (3) reduced fishing success near the disposal area, and (4) potential mobilization of pollutants previously bound in the bottom sediments (Wolfenden and Carlin, 1992).

The Recommended Plan (Alternative B.2.) calls for three or four disposal sites: the proposed Ocean disposal site offshore of the Farallon Islands, Sonoma Baylands in Sonoma County, Galbraith Golf Course in Alameda County, and, if required by the Regional Board, sediment drying at the Ninth Avenue Marine Terminal on Port property with ultimate disposal at a landfill.

Staff of the Regional Board has worked closely with the US Environmental Protection Agency (USEPA), the Bay Conservation and Development Commission (BCDC) and the Corps of Engineers in planning the testing of Oakland deepening project Phase III sediments. Additionally, staff have been involved in the Long Term Management Plan for dredged material (LTMS) and have reviewed several studies which have utilized Oakland deepening project data. Therefore, we are familiar with the vast data

sets which comprise this project and the myriad of environmental issues which are inherent in this and other large dredging projects.

The DSEIS/EIR describes use of some 2.6 million cubic yards of sediment for habitat restoration at the proposed Sonoma Baylands site. As you may be aware, the Regional Board issued Dredged Material Reuse Requirements (DMRR) for the Sonoma Baylands on June 21, 1993. Those requirements are analogous to Waste Discharge Requirements (WDR) which are routinely issued by the Regional Board. Waste Discharge Requirements are issued in-lieu of Water Quality Certification for wetland/upland discharge of dredged material. The DMRR's for the Sonoma Baylands project regulate the placement of dredged material at the site and require case-by-case approval for particular dredging projects.

General Comments

We find that the DSEIS/EIR covers most environmental impacts in a balanced manner. Information about significant impacts and details regarding several alternatives are lacking; however, such gaps are likely a result of inadequate site study and not any failure on the part of the document writers. Therefore, we concur with the Corps/ Port (Chapter 7) that it is difficult to compare impacts between several of the disposal sites because of the disparity of information about the sites.

We concur with the Corps/Port that the preferred project should not include the Bay Farm Island Borrow Area, Leonard Ranch or the Alcatraz Island aquatic site (SF-11). Our opposition to these disposal sites stems largely from a lack of base-line data, information about site conditions, and verified modelling of dredged material disposal, respectively. Additionally, we feel that impacts to surface and groundwater, and groundwater monitoring needs have not been investigated for Leonard Ranch. Wetland mitigation needs have not been completely determined for either the Leonard Ranch or Montezuma wetlands making a side-by-side comparison difficult. However, the fact that Leonard Ranch and Montezuma are "behind" some of the other disposal alternatives should not preclude these sites from future consideration.

Galbraith Golf Course:

Conceptually, the disposal of dredge sediment at Galbraith is acceptable pending review of the Report of Waste Discharge (ROWD). We are concerned that there are several potential impacts that were not addressed in the DSEIS/EIR and need to be addressed in the ROWD. These impacts focus on (1) the stability of the levee containment system, (2) leachate migration control, (3) the potential that unacceptable dredge material may unknowingly be discharged to Galbraith because too few waste acceptance (leach tests) have been run to adequately characterize the dredge material, and (4) the potential that the treated decant water may not meet effluent limits due to higher than anticipated pollutant levels. We have provided more detailed discussion of our concerns below, on page 11 of this memo.

Bay Farm Island Borrow Area:

As we have stated in recent correspondence to the Corps (October 6, 1993, and February 25, 1993 letters to Lt. Col. Cardoza, USACOE-SF) we are opposed to disposal of dredged material at the Bay Farm Island Borrow "Area" (also referred to as the Borrow Pit) until the site has been studied and the results of the studies are presented to the Regional Board. Only through a comprehensive and public evaluation process, such as the LTMS could provide, will staff consider the Borrow Area site for dredged material disposal activities. At the national level, the Corps and USEPA have issued guidance in the form of "frameworks", for the siting and designation of new aquatic disposal sites. These frameworks outline the need for comprehensive and detailed studies of hydrodynamic, engineering and aquatic

- 3 | resources which need to be carried out prior to designation of an aquatic site. One should consider the magnitude and level of effort that went into EPA's siting of the Section 102 ocean disposal site (DODS). Regional Board staff feel strongly that a new in-bay disposal site would required at least the same, if not greater, level of scrutiny.
- 4 | Additionally, we feel that, as a matter of policy, the applicant should evaluate the Bay Farm Island Borrow Area for habitat enhancement in combination with confined aquatic disposal (CAD). The proposed use of the Borrow Area site in the DSEIS/EIR would result in a final benthic elevation well below grade. As discussed at previous LTMS meetings, and briefly mentioned in the US Fish and Wildlife Coordination Act Report (Regional Board staff's comment letter of April 7, 1994, to Mr. Dale Pierce, USF&WS) there is a potential to actually enhance the benthic environment at the Borrow Area site. We have heard discussion of eel grass bed restoration "on the pit" and feel that it would be an important design criteria, should the Corps or Port or Oakland decide to pursue development of the Borrow Area disposal Area for future projects.

Deep Ocean Disposal:

We have reserved comment on the deep ocean disposal site (DODS) alternative to a few brief comments because our jurisdiction over the site is limited to transportation issues for exiting barges, and because USEPA and the State Department of Fish and Game will be commenting on use of that site as it relates to potential to impact biological resources. Additionally, we feel that the impacts due to disposal at the ocean site have been adequately addressed in the final EIS for DODS.

- 5 | We feel that is appropriate to dispose of dredged material at the DODS under the following circumstances: the material has been shown through testing to be suitable for ocean disposal and the project volume is sufficiently large to likely cause prolonged changes in water quality at one of the in-bay disposal sites. For about 2 million cubic yards of the Oakland project, the above conditions hold true, and so we encourage to Corps and Port to pursue disposal of the designated material at DODS.

Alcatraz Disposal Site:

Disposal of the Oakland deepening sediments at the Alcatraz dredged material disposal site (SF-11) is not appropriate. We concur with the Corps/Port (Chapter 7) that the monthly and annual target volumes specified in the Regional Water Board's Basin Plan and the Corps of Engineers' Public Notice Number 93-3 for disposal at SF-11 would likely be exceeded. Additionally, other maintenance dredging projects which routinely dispose of material at the site would be compromised.

6

Project Site Groundwater:

The impact to groundwater at the dredge site apparently was omitted from the DSEIS/EIR and should be addressed in the final document. We note that there are adequate discussions of groundwater at the upland disposal sites (i.e., Leonard Ranch, Sonoma Baylands, Montezuma Wetlands and Galbraith). There has been a long-standing concern that the deepening of the Inner Harbor could adversely affect water quality of the Merritt Sand aquifer. The Merritt Sand is a large aquifer located in the area of downtown Oakland and the City of Alameda. The aquifer is a significant potential source of municipal drinking water, and is currently a source of industrial cooling and process water; as well as, a tap and irrigation water source for numerous individuals in the City of Alameda who own private wells. Therefore, the potential for degradation of the Merritt Sand aquifer must be addressed by the project proponent.

7

My staff have discussed this issue with the Port in the past, and in fact the Corps had installed several monitoring wells in the past during earlier phases of the Oakland Improvements project in the late 1980's.

Groundwater from the monitoring wells along the Inner Harbor were sampled primarily for salinity. However, due to the nature of this project, sampling of groundwater from discrete points alone, would not fully address the concerns raised above. The assessment of impacts to groundwater should be addressed by also examining the regional geology and the relative impact of dredging from 38 to 42-feet in the areas where the Merritt Sand exists. The DSEIS/EIR should examine project impacts as compared to other threats to the resource, such as leaking underground storage tanks. Current and potential use of the Merritt Sand aquifer by the Port, its tenants, the Naval Air Station and other City of Alameda residents should be fully examined. The Port may be able to make use of their in-house GIS facility which has been programmed to track soil and groundwater pollution data.

Maximum Wetland Restoration:

A second issue that should be addressed concerns the fact that the Alternative B.1. "Maximum Wetland Restoration", does not include the use of both the Montezuma and Sonoma Baylands sites. We understand that there are significant logistical and contractual constraints which would make this scenario difficult to achieve. The DSEIS/EIR also states that an assumption was made that "cover" and "non-cover" sediments would need to be deposited at Montezuma in a one-to-one ratio (page 2-55). However, it would be illustrative to describe why the combined Sonoma Baylands-Montezuma-Port/Landfill alternative was not selected for consideration (Page 2-17, Section 2.6).

8

8 ↑ For example "cover" and ocean acceptable material from the deepening project could be placed at Sonoma Baylands, "non-cover" ocean unacceptable material at either site could be placed at Montezuma, and material not acceptable could be disposed of at either a permitted landfill or a reduced-scale Galbraith project. Additional cover material for both wetland restoration projects could come from other dredging project in the region.

Specific Comments - Disposal and Beneficial Reuse other than Galbraith

<u>Page # / Line or Table #</u>	<u>Comment</u>	
S-6 / S-2	Alternative A.1: With respect to Galbraith, Regional Board staff have discussed with the Port the need for waste containment structures and other design criteria (see Galbraith comments below).	9
S-11 / S-2	Alternative B.1: As stated in previous correspondence, we concur with the Corps/Port that restoration of Sonoma Baylands with dredged material, as proposed in the DSEIS/EIR, would be self-mitigating.	
S-9 / S-2	The information used for assessment of the Montezuma site is dated and subject to revision. Staff suggest that the Corps/Port consult staff of the Corps Regulatory Branch and Solano County Department of Environmental Management to obtain the most current copy of the DSEIS/EIR for the project. For example, it is our understanding that the 10-acre pilot project is not currently proposed. Instead the project would be built in phases, with pilot monitoring conducted on the first phase (about 200 acres). It is also not clear at this time whether off-site mitigation of jurisdictional wetlands would be necessary or whether the Corps and Solano County would find the project self-mitigating.	10
S-26 / S-3	With respect to disposal at Alcatraz and Bay Farm Island Borrow Area, we do <u>not</u> agree that project <u>as proposed</u> , would be in "full compliance" with either the Clean Water Act, or the Porter-Cologne Water Quality Control Act (see General Comments, above).	11
3.2-9 / 21	We do not agree with the statement: "In general, Bay-wide water quality concerns in terms of pollutant levels (for example, as shown in the Mussel Watch Program) are considered relatively low".	12
3.2-11 / 6	This section lacks a description of local groundwater resources in the Oakland Harbor area (see General Comments, above).	13
3.2-14 / 27	Again, we question the relevance of stating that "...the Bay is overall relatively clean with the exception of localized industrial and municipal areas". First of all, the Port of Oakland <u>is</u> one of	14

14		those "industrial areas". Secondly, sediment testing of the Inner Harbor south of the project area, as well as sediment testing of the Turning Basin is ample evidence of wide-spread sediment pollution. It should also be noted that the Oakland Inner Harbor is listed as a known "toxic hot spot" on the SWRCB's Bay Protection and Toxic Cleanup Program list of potential and known aquatic toxic hot spots.
15	3.3-6 /	A discussion of naturally occurring chromium, such as found on page 4.2-47, should also be included in this section.
16	4.2-3 / 32	This sentence is vague and unclear.
17	4.2-3	It should be noted that past experience with sediment disposal ponds have shown that settling of decant water is more effective when an internal multi-stage berm system is constructed. Reduction of suspended sediment is usually the most cost - effective way to decrease pollutant levels in the effluent and hence meet NPDES permit limits.
18	4.2.3.3	We agree that chromium appears to be elevated in Bay sediments due to both natural and man-made causes. Regional Board staff will consider the chromium criterion when the Interim Sediment Screening Criteria document is revised, Staff will likely base any changes to the Criteria, in part, on data developed via the Bay Area Regional Monitoring Program.
19	4.2-13 / 32	We believe the definition of a "short term impact " as one that "lasts one year" is misleading.
20	4.2-13 / 42	We do not concur with the application of the limiting permissible concentration (LPC) model for in-bay disposal. The assumptions inherent in the model are not valid for San Francisco Bay disposal sites.
21	4.2-14 / 1	Again, for Bay Farm Island Borrow Area disposal, application of the LPC as described in the Green Book, is not valid.
22	4.2-14 / 32	Note that resuspension is not a <u>source</u> of new sediment to the Bay system so it is misleading to state that it is a "contributor" comparable to Delta sediment flux.
23	4.2-15 / 39	Note that confirmation monitoring of barge turbidity may be a condition of the State's Water Quality Certification of this project.
24	4.2-16 / 5	Though the discussion addresses impacts at the dredge site, significant decreases in dissolved oxygen (DO) and an increase in

	suspended sediments is just as likely to occur at the disposal site. Near-bottom oxygen depletion is a key concern with use of the Alcatraz disposal site (SF-11).	24
4.2-16 / 37	While resuspension by cutterhead-type dredge may be reduced at the dredge site, appreciable <u>overflow</u> usually occurs if the material is pumped into nearby barges. Therefore, this discussion is only correct if the disposal is at an adjacent upland site. If the material is pumped to a barge, the resultant overflow can be expected to produce turbidity equal or in excess of a clamshell dredge.	25
4.2-18 / Table 4.2.6.1.1	The heading "Basin Plan Screening Criteria" is not correct. The heading should be entitled: Basin Plan Water Quality Objectives" and should reference the edition cited. The numerical objectives listed are correct for 1986 Basin Plan and are appropriate for comparison purposes.	26
4.2-22 / 9	Note that the Corps has agreed to limit barge overflow to 15 minutes. This time limit is standard procedure for all San Francisco Corps of Engineers maintenance dredging projects using hopper dredges.	27
4.2-29 / 23	See comment above regarding LPC, on page 4.2-13.	28
4.2-30 /18	As discussed in the General Comments above, use of the Bay Farm Island Borrow Area site would result in a finished bottom elevation which is still well below the surrounding bay floor. For benefits of habitat restoration to be realized, the elevation of the capped site would need to be brought up to grade.	29
4.2-30	Staff find that the impacts expected at the Bay Farm Island Borrow Area have not been adequately investigated (see discussion above in General Comments)	30
4.2-30 / 38	With respect to release of material during placement at the Borrow Area, the use of silt curtains, tremie pipes and other engineering controls should be discussed.	31
4.2-32 / 12	We note that while Borrow Area design plan calls for construction of about 19 or 20 "cells" throughout the pit, there is no suggestion of how the discharge would be monitored and the correct placement of contaminated and capping material ensured.	32
4.2-32 / 39	There appear to be actually 10 mitigation measures for LPC site exceedences, not two.	33

- 34 | 4.2-32 / 46 | Current velocity should be expressed in cm/sec to be consistent with the rest of the document.
- 35 | 4.2-34 / 38 | Water quality impacts from the proposed use of Leonard Ranch have not been fully evaluated. As indicated elsewhere in the DSEIS/EIR, operation of Leonard Ranch as a contaminated sediment rehandling facility would require a permit issued by the Regional Board. Both Waste Discharge Requirements and an NPDES permit would be required for the use described. We note that there have been only three exploratory monitoring wells drilled at Leonard Ranch (DSEIS/EIR Appendix D). A full hydrological and geological characterization of the Leonard Ranch site would be necessary in order to establish base-line conditions and for Regional Board staff to assess the threat to surface and groundwater posed by the proposed project. During the permit process, site-specific attenuation factors for various pollutants could be developed.
- 36 | 4.2-38 / 46 | As part of the Regional Board permitting process for Leonard Ranch, an abandoned well survey would be required. All inactive wells on-site would have to be closed following State Department of Water Resources guidelines for well closure.
- 4.2-39 / 21 and 29
- 37 | | Note that an individual point source NPDES permit would be required for the proposed operations at Leonard Ranch, while some elements of the General non-point NPDES Best Management Practices (BMP) for construction projects would also be applicable.
- 38 | 4.2-40 / 37 | As mentioned above, a full groundwater characterization would be necessary in order for the Regional Board staff to issue a permit for operation of the site. An assessment of threat to groundwater posed by sediment rehandling operations would be required. In order to investigate the potential for infiltration of contaminated surface water to reach shallow and deep groundwater, a pump test would likely be required.
- 39 | 4.2-47 / 22 | Note that the units for the acute toxicity of chromium VI in saltwater is incorrect. The units are in parts per billion (ppb), not parts per million (ppm).
- 40 | 4.2-48 / 17 | Where is the "increased turbidity" at Sonoma Baylands likely to occur? Will it be restricted to the project area? Will a turbidity plume extend outside the site? How much in excess of natural turbidity will this "short term" condition be, given seasonal patterns in the San Pablo Bay area?

4.3-2 / 46 and 4.3-3 / 14	We agree that in there is a net environmental benefit to removing contaminated sediments from the Bay system and placing them in a confined and controlled environment. Pollutants found in the sediment will no longer pose a threat to the Bay ecosystem if they are immobile (hence not bioavailable). There should be very little or no impact from pollutants in these sediments once they are placed in an upland confined waste management unit, such as the proposed Galbraith site constructed to RWQCB criteria.	41
4.3-8 / 45	Issues surrounding the long-term management of the Bay Farm Island Borrow Area site, such as post-closure liability, have not been explained and would be the subject of Regional Water Board permit conditions.	42
7-2 / 5	Regional Board staff have reviewed drafts of the Montezuma DSEIS/EIR, the project Technical Report, and have toured the site. We do not feel that there are "...unmitigable biological impacts..." with the project. The project would be largely self-mitigating. The 576 acres of existing jurisdictional seasonal wetlands are definitely "...mostly grasslands.." as the next sentence of the DSEIS/EIR accurately describes. However, it should be noted that these are not pristine prairie grasslands, but rather degraded pasture used for cattle grazing. Purchase of a development lien on nearby agricultural lands, for example, could mitigate for loss of the grasslands at the site.	43

Specific Comments - Galbraith

44 This section addresses use of the Galbraith Golf Course as an upland disposal site for approximately 1.3 million yd³ of dredge material unacceptable for disposal at either the deep ocean disposal site (DODS) offshore of the Farallon Islands or the Sonoma Baylands site in Sonoma County. Current plans call for submittal of a Report of Waste Discharge (ROWD) by July 1, 1994 with consideration for adoption of WDRs at the October 1994 Regional Water Quality Control Board Meeting.

45 We have also discussed with the Port the possible disposal at Galbraith, of dredge material previously destined for the Ninth Avenue Marine Terminal (approximately 60,000 yd³). While the bulk chemistry data appear to indicate that the material could be safely disposed at the Galbraith Site, no leachate data is available nor have any decant water tests been run. Port staff have stated that it would be impracticable to collect in-situ samples at this stage of the project. As a way of allowing the project to proceed and still be protective of the environment, approval for discharge of the Ninth Avenue material at Galbraith could be considered provided the following four impacts are acceptably addressed. The Port must address: (1) the stability of the levee containment system, (2) leachate migration control, (3) the potential that unacceptable dredge material may unknowingly be discharged to Galbraith because too few waste acceptance (leach tests) have been run to adequately characterize the dredge material, and (4) the potential that the treated decant water may not meet effluent limits for straight discharge.

Conceptual Design:

As discussed in the DSEIS/EIR, up to 1.3 million yd³ of dredged material unsuitable for unconfined aquatic disposal would be placed at Galbraith. The dredge material would be pumped as a slurry mixture at 20% solids into a containment levee at Galbraith. The earthen containment levee will be approximately 25 ft in height and encircle the 117 acre site (a distance of about 2 miles). Once the material is dried and the containment levees are removed/spread, the site will be about 8-10 feet above existing grade. Subsurface Consultants' conceptual design predicts 2.5 feet of leachate infiltration due to low permeabilities and low head differences.

General Information:

46 California Code of Regulations Chapter 15 regulations governing "discharges of waste to land" clearly apply to disposal of polluted dredge sediment at the Galbraith Golf Course. The DSEIS/EIR states that the design of the containment features will follow landfill design standards prescribed in Article 23, Chapter 15 as required by the RWQCB. In addition, the decant water and extracted groundwater should be regulated under an NPDES Permit.

47 Construction of a waste management unit meeting all applicable Chapter 15 siting and design standards for disposal of the dredge sediments at the Galbraith Golf Course is likely infeasible (e.g., base liner, minimum 5 foot depth to groundwater,

maximum moisture content of 50%). However, alternatives to the Chapter 15 construction and prescriptive standards are permitted and may be considered if an equivalent protection to water quality can be achieved. The Galbraith Golf Course site should be protective of water quality under an appropriate design and conservative waste acceptance criteria.

The proposed project can be evaluated with respect to Chapter 15 based on the three major issues of (1) Waste Classification criteria, (2) Siting, and (3) Construction.

Waste Classification:

Within Chapter 15, waste is classified by comparing levels of soluble pollutants to applicable water quality objectives. Generally, attenuation factors are assigned to account for siting and design features.

The volume of waste acceptable for discharge to the Galbraith site is highly dependent on the pH used in solubility tests, the water quality objectives and the attenuation factor used. The level of soluble pollutants is normally determined by performing a leach test to determine whether sufficient amounts of extractable constituents are available to leach to groundwater under acidic landfill conditions. Two leachate tests are generally run to characterize a waste. The Waste Extraction Test (pH of 5) for inorganic substances and the Toxic Characteristic Leaching Procedure (pH of 2.9-4.9 depending on sample pH) for inorganic substances. In upland environments, the pH of dredged sediment may drop as sulfides in the sediment are oxidized and acid is created. However, the DSEIS/EIR argues that a significant pH drop has not been shown based on previous Port of Oakland upland disposal projects.

While it's not unusual for Board staff to allow dischargers to adjust the pH of the leaching tests based on site specific factors, we don't currently have enough information to recommend using a neutral pH. However, since one of the mitigation measures is to monitor soil pH for low pH conditions and adding lime to the problem area to neutralize soil acidity, we will not argue against a neutral pH at this time.

Based on samples collected from areas to be dredged, the sediment contains nonhazardous levels of metals, polycyclic aromatic hydrocarbons, and tributyltin. Also present, but less frequently detected, are nonhazardous levels of PCB's and pesticides. Contamination from the dredge sediment could potentially impact surface water and groundwater quality. Thus applicable water quality objectives are the more stringent of drinking water MCLs and Basin Plan effluent limits. Attenuation factors proposed in the DSEIS/EIR are 200 for inorganic substances and 100 for organic which are typical acceptance limits assigned for existing landfills situated in similar locations¹.

An insufficient number of samples have been collected to adequately characterize the

¹ Material acceptance limits are calculated as follows: Acceptance limit = (Water Quality Objective X Attenuation Factor)/Test Method Dilution Factor

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dredge material proposed for Galbraith. For example, only 69 samples have been collected for bulk (total) analysis and 18 samples collected for leach (soluble) analysis, to characterize 1.3 million yd³ of dredge material. If these results are truly representative of the dredge sediment than disposal at Galbraith appears feasible. However, the existing data may not be representative. Indeed, based on a statistical evaluation of the existing data conducted by the Port's consultant (HLA, 1994), from 100 to 500 additional samples would be required to "adequately characterize the mean of a population" for various pollutants.

Leachate Testing:

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Too few waste acceptance/leachate tests have been run to adequately characterize the dredge material. Thus dredge material unacceptable for disposal may be unknowingly discharged to Galbraith Golf Course. According to the Port, obtaining the additional underwater sediment samples needed to adequately characterize the dredge material would be impracticable. Therefore, we recommend that dredge material be sampled during discharge (and during any pilot project that is scheduled). In addition, confirmation sampling must be conducted after sediment drying. Any dredge sediment discharged to Galbraith, that exceeds waste acceptance criteria, should be excavated and disposed at an appropriate landfill.

Sitting Issues:

A composite stratigraphic column of the existing fill material and native sediments beneath the Galbraith Golf Course is shown in Table 1.

Table 1. Generalized Stratigraphy

General Unit	Sub Units	Description	Depth below ground surface (ft)
Artificial Fill	Vegetative Cover	sandy silt and clay to silty sand with gravel	0-10.5
	Refuse	5-50% refuse in a soil matrix (glass, wood, rags, paper rubber etc.)	0-12.5
	Construction Debris	10-50% wood brick and concrete in a soil matrix	0-20 present in western portion of site
	Hydraulically Placed Fill	dredged material similar to bay mud deposits one sample is sand	4.5-9.5?
Bay Mud	Younger Bay Mud	soft dark gray clay	10-21.5 (layer is 4-5 ft thick)
	Older Bay Mud and alluvium	sandy clay to sand	2-35 (layer >20 ft thick)

The proposed project calls for building levees up to 25 feet in height to contain the saturated dredge sediments. Given the complicated and potentially unstable nature of the deposits at Galbraith, the seismic and static stability of the levees must be thoroughly evaluated.

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Hydrogeology:

Depth to groundwater ranges from 2.5 to 15.5 ft below ground surface and averages about 10 ft. The groundwater table is generally within fill material or the upper few feet of bay mud/alluvium. Based on water levels in well pairs their currently appears to be neither a significant upward or downward gradient. However, a significant downward gradient will be created once the dredge material is placed on the Galbraith site. Groundwater flow is west/southwest. The drainage channel that bisects the site is tidally influenced.

Based on limited data it appears that the groundwater beneath the site is generally not tidally influenced. However, local tidal influence is expected near the drainage channel which is tidally influenced.

Issue: Chapter 15 (Section 2530) requires that all new waste management units be constructed and operated to ensure a minimum of 5 feet above the highest anticipated elevation of the underlying groundwater. Ambient conditions at the existing landfill do not meet this criteria and additional mounding of the water table is likely due to the weight of the dredge material. Thus, groundwater extraction must be part of the overall design.

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Existing Groundwater Contamination:

Groundwater beneath a portion of the site is contaminated primarily by petroleum hydrocarbons at dissolved fractions up to 420 ppm TPH (as motor oil). Contamination is highest in the southern portion of the site. Other contaminants include TCE and cis-1,2-DCE, at levels below 50 ppb (total). The lateral extent of the groundwater contamination has not been fully defined (HLA, 1993).

According to the DSEIS/EIR vertical migration of leachate from the dredge material or the existing groundwater is not considered significant due to the low permeability of the native bay muds. In addition, the low permeability dredge material should act as a cap preventing (1) significant infiltration of fluids through the petroleum hydrocarbon contaminated fill material and (2) continued vertical leaching.

However, lateral migration of pore water/slurry water through underlying, potentially higher permeability landfill materials may be significant. Also, loading of dredged materials on underlying landfill and native material may induce lateral migration of landfill fluids as pore pressures are increased. This is especially true in areas of the landfill where existing petroleum hydrocarbon / leachate may be squeezed out of the existing fill material.

- 53 | Issue: A groundwater collection system (e.g., perimeter extraction trench) should be installed given the potential that loading of dredged materials on the underlying landfill may induce lateral migration of landfill fluids as pore space is compressed.

Landfill Design:

Minimum prescriptive standards for a waste management unit are listed below with potential alternatives in Table 2.

**Table 2. Minimum Chapter 15 Prescriptive Standards
for Waste Management Unit Design**

Item	Construction Standard	Potential Alternative
Clay Liner	$<1 \times 10^{-6}$ cm/sec	liner not required
Cutoff wall	$<1 \times 10^{-6}$ cm/sec if required	none, cut off wall required
Capacity of precipitation and drainage control facilities	100 year, 24 hour	none
Seismic design	withstand max. probable earthquake	For containment levees, design based on short-term risk.
Depth to groundwater	Five foot vertical separation	Perimeter extraction trench could be considered an engineered alternative

Closure: The DSEIS/EIR does not adequately address closure/post closure aspects of the site. A full Chapter 15 cap may not be required (2 ft foundation layer, 1 ft clay and 1 ft vegetative cover, minimum 3% slope). However, the DSEIS/EIR should specify the proposed thickness of the cover material and the minimum finished grade of slopes.

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Monitoring: No discussion of the long-term groundwater and surface water monitoring is included in the DSEIS/EIR. At a minimum, quarterly monitoring should be conducted until the dredge material is dry followed by semiannual monitoring.

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Potential Impacts:

Table S-2 of the draft DSEIS/EIR lists Potentially Significant Impacts of the various disposal alternatives. This table is incomplete because it fails to include a number of important potentially significant impacts. There are only two potentially significant impacts listed in the DSEIS/EIR for the Galbraith site (see Table 3, below). Based on our review, there are number of other potentially significant impacts associated with the project. These impacts should be included in the final DSEIS/EIR as identified on table 4, below.

56

Other Issues that should be addressed:

- o The DSEIS/EIR proposes to use "K-Rails" to contain the dredge material at the Ninth Ave. Terminal. This design is unacceptable because the K-Rails lack sufficient freeboard and lateral stability. If the Ninth Ave. Terminal is used for

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- 57 ↑ dredge material drying, then an alternative design that allows for a minimum of 2 feet of freeboard and adequate lateral stability should be proposed.
- 58 | o Sediment from the Turning Basin wings contains the highest levels of pollutants. This material should not be placed at Galbraith at the beginning of the project when leachate infiltration is expected to be highest. Rather, the turning basin wing sediment should be discharged roughly mid-project so that it is encapsulated between the cleaner underlying and overlying sediments.
- 59 | o As stated on page 4.2-62, the final grade will be about 2 to 4 feet above existing grade after the sediments have dried. This estimate appears too low. Based on other information submitted by the Port, it appears the final grade will be about 7 feet above existing grade not including the regrading of the levee material.²
- 60 | o We are concerned that the Corps and Port have not fully explored ways in which decant water can be minimized. As we have discussed with the Corps and Port in the past, make-up water taken from the Bay could be supplemented with decant water in a closed-loop system. The Corps and Port should examine the costs and benefits of constructing a recirculating slurry pump-out prior to submission of the ROWD.

²1.3 mcy / 117 acres X 4.84 X10³ yd/acre = 2.3 yds or 6.9 feet of dredge material (without levee material)

Table 3. Significant Impacts

Resource	Potentially Significant Impact	Management Mitigation Measure	Significance after Management/ Mitigation
Hydrology	At the Galbraith Golf Course site, significant impacts on groundwater quality due to the lateral migration of existing leachate fluids containing petroleum products	Design containment structures to meet RWQCB requirements.	Insignificant
Geology, Soils, and seismicity	If a large magnitude earthquake occurred on a nearby fault, earth quake-induced levee failure at the Galbraith Site could cause geologic hazards on surrounding features such as Doolittle Dr., the interior drainage canal, and the San Leandro Waste water Treatment Plant.	Design levees using standard geotechnical engineering practices to prevent catastrophic impacts on adjacent facilities in the event of failure.	Insignificant

**Table 4. Potentially Significant Impacts to
include in the final DSEIS/EIR**

Resource	Potentially Significant Impact	Management Mitigation Measure	Significance after Management/ Mitigation
Geology, Soils, and seismicity	Earthen levees could fail due to overtopping if the weir becomes blocked during a major rainfall event. Levee failure at the Galbraith Site could cause geologic hazards on surrounding features such as Doolittle Dr., the drainage canal, and the San Leandro Waste water Treatment Plant.	Design levees using standard geotechnical engineering practices to allow for an emergency spillway. Design with adequate freeboard to handle maximum design rainfall event.	Insignificant?
Geology, Soils, and seismicity	Levees could fail due to differential settlement of the underlying fill. The levees could also fail due to saturation of the levee material. Levee failure at the Galbraith Site could cause geologic hazards on surrounding features such as Doolittle Dr., the drainage canal, and the San Leandro Waste water Treatment Plant.	Design levees using standard geotechnical engineering practices to prevent unacceptable settlement or saturation. Design with an appropriate factor of safety.	Insignificant?
Surface water	At the Galbraith Golf Course site, significant impacts on surface water quality due to discharge of decant water. ³	Design treatment system and include multiple sedimentation ponds to reduce turbidity. Consider discharging to EBDA pipeline. Obtain and comply with NPDES permit.	Impacts reduced but likely not to insignificance regarding turbidity.

³Considering 1.3 mcy at 20% solids = 4 cuyd of water for each cuyd of dredge material. Thus 1.3 mcy X 4 cuyd water X 202 gallons per cuyd = 1,050,000,000 gallons of water or 3223 acft. Of this 3223 acft, 292 acft (2.5ft X 117 ac) is predicted (in the DSEIS/EIR) to migrate vertically through the landfill until the dredge material effectively seals off the landfill due to settlement of the fine grained dredge material. While a significant quantity of the decant water will be evaporated no mass balance is estimated in the DSEIS/EIR. In any case the volume of decant water is going to be very large - perhaps on the order of 100's of millions of gallons.

**Table 4. Potentially Significant Impacts to
include in the final DSEIS/EIR**

Resource	Potentially Significant Impact	Management Mitigation Measure	Significance after Management/ Mitigation
Surface water	Due to the limited data on decant water quality, any water treatment system may not work due to unanticipated levels/constituents	Prepare pilot project to access actual decant water quality and effectiveness of treatment system prior to full scale start-up.	unknown
Groundwater/ Surface water	Contaminants (including metals, polycyclic aromatic hydrocarbons, and tributyrin) in the dredge material may be present in soluble levels above applicable water quality objectives.	Develop waste acceptance criteria for the Galbraith site in conjunction with RWQCB using appropriate pH of leachate and appropriate attenuation factors.	Insignificant
Groundwater	Too few waste acceptance/leachate tests have been run to adequately characterize the dredge material. Thus dredge material unacceptable for disposal may be unknowingly discharged to Galbraith Golf Course. According to the Port, obtaining the additional samples (perhaps 100 samples) needed to characterize the dredge material would be impracticable.	Sample dredge material during a pilot project (see above) and during discharge. Conduct confirmation sampling after sediment drying. Any dredge sediment discharged to the Galbraith Golf Course site, that exceed waste acceptance criteria, will be excavated and disposed at an appropriate landfill.	Insignificant
Groundwater	At the Galbraith Golf Course site, significant impacts on groundwater quality due to the lateral migration of existing leachate fluids containing petroleum products.	Install leachate collection system (i.e., perimeter extraction trench). Potential options for discharge of collected leachate include (1) on-site treatment and discharge under an NPDES permit, (2) off-site treatment at a POTW, (3) on-site treatment and discharge to the EBDA pipeline.	Insignificant

**Table 4. Potentially Significant Impacts to
include in the final DSEIS/EIR**

Resource	Potentially Significant Impact	Management Mitigation Measure	Significance after Management/Mitigation
Groundwater	The Galbraith Golf Course site does not meet the Chapter 15 requirement for a 5 foot separation between groundwater and waste.	An engineered alternative such as a perimeter extraction trench would meet the RWQCB requirements.	Insignificant
Groundwater and Surface water	At the Galbraith Golf Course site, potential significant impacts on groundwater quality may result due to the lateral migration of existing leachate fluids containing petroleum products.	Long-term groundwater and surface water monitoring.	Insignificant

:42memo



April 28, 1994

Ms. Jody Zaitlin
Port of Oakland
Environmental Department
530 Water Street
Oakland, CA

Mr. Roger Golden
Corps of Engineers
Environmental Branch
211 Main Street
San Francisco, CA 94105

RE: Comments on the Draft Supplemental Environmental Impact Report/ Environmental Impact Statement - Oakland Harbor Deep-Draft Navigation Improvements

Dear Ms. Zaitlin and Mr. Golden:

Thank you for the opportunity to review the above document. The City of Alameda has the following concerns:

1. The document does not adequately address interruption to the Alameda/Oakland Ferry Service. It would appear that the actual dredging activities, as well as the removal of dredged materials, has the potential for causing "slo bells" and/or restricting the area of navigation such that existing marine operations become congested. Any activity that would disrupt the ferry service's ability to maintain its scheduled departures and arrivals would be significant. This document should list mitigations which will ensure that slo bell operations are avoided during commute hours, including a mitigation that the Contractor will provide monetary restitution if his/her activities interfere with the ferry meeting its commute schedule. 1

2. The landslide analysis indicates that most of the new cargo will "intermodal" (pg. 4.8-5) and therefore, have little impact on the regional transportation system. Please explain whether adequate intermodal facilities currently exist. If such facilities do not currently exist, please indicate a mitigation which includes building such a facility. 2

3. It would appear from Table 4.8.3.1-8 on page 4.8-11 that the cumulative impacts associated with additional rail traffic are not neutral, but significant. One of the proposed mitigations is 3

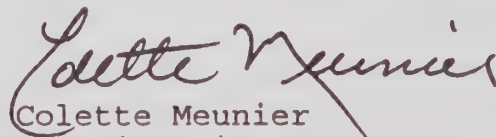
Planning Department, Room 102

City Hall
2263 Santa Clara Avenue · 94501-4454
Tel: 510.748 4554

- 3 | signal upgrades which would allow trains to operate at higher speeds. Additional analysis is needed to address the safety considerations associated with increased train traffic and train speeds. The proposed signal upgrades should occur concurrent with the project, and therefore, additional funding and timing information about this mitigation needs to be presented. Additionally, the analysis should address train blockage of access to I-880 and access by pedestrians to the ferry terminal at Clay Street.
- 4 | 4. Page 4.8-10 indicates that additional employment is likely within the surrounding area. This additional employment has not been quantified and analyzed, although it could significantly impact the local area.
- 5 | 5. There does not appear to be any discussion of the potential impacts of this project on under water access to Naval Air Station Alameda, including submarine facilities serving this facility.

Thank you for the opportunity to comment.

Sincerely,


Colette Meunier
Planning Director

CM:CE

xc: City Manager
City Attorney
Public Works Director
Transportation Manager
Base Conversion Project Director

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FILE: PORT OF OAKLAND -1994- MISCELLANEOUS ENVIRONMENTAL REVIEWS

C I T Y O F O A K L A N D

Interoffice Letter

TO: Port of Oakland Environmental Department
ATTN: Jody Zaitlin
FROM: Office of Parks and Recreation (OPR)
DATE: May 2, 1994

RE: DRAFT SUPPLEMENTAL EIR/EIS
OAKLAND HARBOR DEEP-DRAFT NAVIGATION IMPROVEMENTS

Thank you for the opportunity to review and comment upon the Draft Supplemental Environmental Impact Report/Statement (DSEIR/S) for the Oakland Harbor Deep-draft Navigation Improvements (Project).

As may be anticipated, the OPR is concerned about the impact of the Project on Lew F. Galbraith Golf Course (LFGGC). Although the DSEIR is generally adequate in addressing these concerns, the following comments are provided for consideration:

1. **Air Quality** - construction activities which generate dust should be limited during the afternoon hours when winds typically pick up off the Bay. During such times, stated mitigation measures may not be adequate to control airborne dust. In addition, settlement areas may also require daily dust mitigation activities once they are sufficiently dried out. | 1
2. **Geology, Soils and Seismicity** - additional testing should be mandated for the dried dredge materials to determine their suitability for golf course construction. If these materials prove to be excessively saline, silty, and to contain constituents otherwise unsuitable for turfgrass and other golf course landscaping, a suitable cap will be necessary upon which to build the replacement golf course. In this event, the OPR strongly prefers that adequate amounts (i.e., four feet) of clean (washed) sand be imported to serve as the fill area cap instead of topsoil; this preference is based upon the superiority of sand as a substrate for turfgrass in terms of drainage, and ease of grading and trenching. | 2
3. **Biological Resources** - for the reasons noted in the DSEIR/S (pages 4.4-44/45), the OPR repeats its recommendation for an adequate sand cap on the fill materials. | 3
4. **Noise** - the placement of pumps and other heavy equipment should be such that excessive noise levels are avoided in the area of the LFGGC Clubhouse, which is slated to remain in operation during the Project. | 4
5. **Socioeconomic Environment** - the major impacts associated with the loss of LFGGC for up to seven (7) years has been noted in both the DSEIR/S and the Memorandum of Understanding (MOU) Between the Port and City regarding the Project. Essentially, the Port will construct a replacement golf course once the dredge materials have been

5. **Socioeconomic Environment** - sufficiently dried. In the meantime, the City and Port have agreed that the Port shall provide mitigation measures to lessen the adverse impact of closing LFGGC on senior and youth golfers. Such measures are currently being developed and will be incorporated into the MOU as appropriate.

- 5 | What is not clear from the MOU is the mitigation required for the loss of the Galbraith Soccer Field, which is heavily used by **adult** soccer players. The OPR wishes to make it very clear that the Otis Spunkmeyer Ballfield (referenced in the DSEIR/S as the North Airport soccer field) should not be linked to the Project and should not be identified as mitigation for the Project's impacts on Galbraith Soccer Field. Spunkmeyer Field has been developed independently of the Project with private donations as a **strictly youth-oriented** soccer and baseball field complex, and is not available for adult use. In addition, the soccer fields listed in the DSEIR/S (Raimondi, Bushrod, and Caldecott) are already heavily scheduled (they are not "underutilized" as stated in the DSEIR/S) and cannot handle additional adult play without further turfgrass degradation at each site.

In view of these factors, the OPR proposes that the Port provide an interim soccer field at one of its currently vacant properties located in the Airport Industrial Park during the time period that Galbraith Soccer Field is out of play. If this is not possible, the OPR recommends that the proposed containment dike plan be modified to preserve the existing Galbraith Soccer Field.

- 6 | 6. **Land Use Plans and Policies** - see comments above regarding the proposed mitigation for the loss of Galbraith Soccer Field.

Overall, the OPR supports the need to preserve the Port of Oakland's competitive position on the Pacific Rim. The mitigations proposed above are consistent with accomplishing this goal while preserving public recreational resources to the fullest extent practicable.

Please contact me or Park Service Manager, Antonio Acosta, at 238-3092 if there are any questions.



FOR CLEVE WILLIAMS
Director

cc: A. Acosta
D. Choy
R. Basarich
A. Manning
S. Muraoka

C I T Y O F O A K L A N D

Interoffice Letter

TO: Port of Oakland Environmental Department
ATTN: Jody Zaitlin
FROM: Office of Parks and Recreation (OPR)
DATE: May 17, 1994

RE: UPDATED MITIGATION INFORMATION
DRAFT SUPPLEMENTAL EIR/EIS
OAKLAND HARBOR DEEP-DRAFT NAVIGATION IMPROVEMENTS

This memo is written to provide updated information regarding the Draft Supplemental Environmental Impact Report/Statement (DSEIR/S) for the Oakland Harbor Deep-draft Navigation Improvements (Project).

Galbraith Soccer Field Mitigation - the loss of the soccer field located adjacent to Lew F. Galbraith Golf Course (LFGGC) remains of concern to the OPR. Mitigation for its loss is appropriate. Fortunately, the OPR will be bringing a new soccer field into play at the Curt Flood Sports Complex in East Oakland later this summer. OPR staff will make the new East Oakland Sports Complex Soccer Field available for use as a replacement field for the LFGGC Soccer Field. The new soccer field will provide the existing users of the LFGGC Soccer Field an improved opportunity for soccer play. It is OPR's belief that with this additional field, the loss of the LFGGC Soccer Field will be adequately mitigated.



CLEVE WILLIAMS
Director

attachments (2)

cc: A. Acosta
D. Choy
R. Basarich
A. Manning
S. Muraoka



OFFICE OF PLANNING & BUILDING • 1330 BROADWAY • OAKLAND, CALIFORNIA 94612

(510) 238-7200
TDD 839-6451

May 2, 1994

Ms. Jody Zaitlin
Environmental Department
Port of Oakland
530 Water Street
Oakland, California 94607

RE: Comments on the Draft Supplemental Environmental Impact Report/Statement

Dear Ms. Zaitlin:

This office, along with the Office of Parks and Recreation, the Real Estate Division of the Office of Public Works, and the City Attorney's Office has reviewed the Draft Supplemental Environmental Impact Report/Statement (DSEIR/S) on the Oakland Harbor Deep-Draft Navigation Improvements. In general, we find the DSEIR/S to be a concise, well written document. We note that the environmental document has identified impacts (biotics, noise, land use, hydrology, geology) on Galbraith golf course facilities. Accordingly we have the following comments.

- 1 | Soccer Field Replacement. The DSEIR/S discusses the replacement of the soccer field on the Galbraith golf course site with a replacement facility on the North Field, along with use of underutilized facilities in the City of Oakland. The City does not have any underutilized soccer facilities which could serve to offset the loss of the Galbraith soccer field. The contingency for the field would be use of a new field at the Curt Flood Sports Center on Oakport Street between 66th Avenue and High Street. If this field is not adequate replacement, however, the City requests the Port's assistance in locating an adequate site for a replacement facility, perhaps within the Oakland Airport Business Park, along with assistance in constructing a replacement facility. This replacement facility would be temporary until such time as the Galbraith golf course is reinstalled, at which time the soccer field should also be reinstalled. Also, the DSEIR/S should note that the relationship of the Galbraith field with a facility on the North Field is not part of the Memorandum of Understanding between the City and the Port.
- 2 | Interim Golf Course Uses. While the dredge material is drying on the Galbraith site, we understand that the clubhouse restaurant, driving range, and putting green will be in operational use. This raises some specific issues regarding how potentially adverse impacts will be mitigated for the users of these facilities. The DSEIR/S is unclear on where berms are going to be located in relation to the interim facilities, and how potential dust and noise potentials will be reduced to less-than-significant levels. A related issue is where the parking for the interim uses will be accommodated. The DSEIR/S also

does not discuss how the berms in proximity to the interim facilities, particularly the clubhouse restaurant, will be landscaped. Additionally, there should be a mitigation added to address dust impacts on the driving range, putting green, and restaurant that calls for the retention of a professional meteorologist to conduct a site specific air quality study that addresses the feasibility of keeping these interim facilities open or relocating them to another site. Similarly, a professional acoustic engineer should be retained to conduct a similar site specific noise study.

Five Year Drying Period. The discussions in the DSEIR/S are based on a five-year drying period. While the Crust Management Program could be extended for an extended period of time, it is unclear how City golf course related uses (i.e., seniors and youth golf programs, use of the driving range, putting green, and clubhouse restaurant) would be accommodated for this extra time. Related concerns involve the health effects of fugitive dust for the users of the interim facilities.

Negative Impact on the Seniors Program. The DSEIR/S does not make any statement regarding the negative impact of the project on the seniors program, whether the disruption is for a five year period or an extended period of time. We feel that the document should address this impact.

Golf Course Memorials. There are many memorials on the golf course which need to be removed during the dredge operations and reinstalled after the golf course is reestablished. We feel that the document should address this impact.

We will send additional detailed comments that have document page references under separate cover. We appreciate this opportunity to review the Draft Supplemental EIR/S, and look forward to receiving a copy of the Final EIR/S.

Very truly yours,

ALVIN D. JAMES
Deputy Director for City Planning



by: ANU RAUD
Environmental Review Coordinator

ADJ:ARK:SIM:sim

cc: Shirley Stubblefield, City Manager's Office
Cleve Williams, Office of Parks and Recreation
Frank Fanelli, Real Estate Division
Donnell Choy, City Attorney's Office

City of San Leandro
Civic Center, 835 E. 14th Street,
San Leandro, California 94577



May 2, 1994

VIA FAX AND US MAIL

Ms. Jody Zaitlin
Environmental Department
Port of Oakland
530 Water Street
Oakland CA 94607

RE: Draft Supplemental Environmental Impact Report/Statement (SEIR/S)
Oakland Harbor Deep-Draft Navigation Improvements

Dear Ms. Zaitlin:

Thank you for including the City of San Leandro in the environmental review process for the above referenced Draft Supplemental Environmental Impact Report/Statement (SEIR/S). We hereby submit the following comments.

1. ODORS

1 | The SEIR/S states that the sediments placed at Galbraith has the potential to generate odors. However, it is not expected that there will be a significant odor problem (page 4.1-16). We recommend that a study be conducted with a detailed analysis which leads to this conclusion. Without a detailed analysis from a study on odor, it is our opinion that a dredge disposal site with an area greater than 100 acres and volume containing approximately 1.3 million cubic yards would have a noticeable odor impact to the general public, such as the business operators and their customers in the immediate industrial area, pedestrians and drivers using Doolittle Drive and Davis Street, and possibly, residents to the west of the Doolittle and Davis area in San Leandro and the City of Oakland.

The SEIR/S also states that the contractor will implement appropriate odor control measures to control odor if any odor problems do arise (page 4.1-16). The SEIR/S does not explain what those appropriate odor control measures are, thus we request a detailed explanation of odor control measures.

2. VISUAL FACTORS

2 | The SEIR/S describes a substantial change in appearance of the site from a maintained golf course for leisure and recreational use to a dredged material disposal site with a containment dike with a crest elevation of 34 feet above Airport Drive. The SEIR/S, however, did

John E. Faria, Mayor

M-184

City Council: Ellen M. Corbett; Howard W. Kerr; Kent W. Myers;
Paul S. Nahm; Linda Perry; Julian P. Polvorosa; Mike Oliver, City Manager

not provide any details addressing the design and the visual impacts of the containment dike when viewed from Doolittle Drive and adjacent properties on the streets. Furthermore, landscape or revegetation details are not shown for the areas visible to San Leandro including the areas to the east and southeast of the containment dike. Without a landscape plan for the dike and the areas in front of it, it is impossible to evaluate the visual impact on the Doolittle Drive area.

The properties to the east and south of Galbraith are developed with various industrial uses within the City of San Leandro. It is our intent to maintain the high-quality standards of the existing area and the good aesthetic condition of the golf course in order to attract new high-quality development and uses to San Leandro. Moreover, the proposed disposal site is highly visible from Doolittle Drive and Davis Street. Thus, we recommend that a visual analysis of the dike and the areas in front of it to the east and south be studied. The design and landscape treatment of the dike and the area in front should be shown in detail. We strongly recommend that the appearance of the final design should be comparable to the Galbraith Golf Course, Doolittle Drive and the City of San Leandro's industrial district, which are attractively maintained.

3. SEISMIC IMPACTS

The SEIR/S states that if a large magnitude earthquake occurred on a nearby fault, severe ground motion and liquefaction could occur. As a result, earthquake induced levee failure at the site could impact surrounding features such as Doolittle Drive and the City of San Leandro's Wastewater Treatment Plant (page 4.3-11). The discussion within the SEIR/S, however concludes that the impacts from these geologic hazards on the Galbraith site are considered minimal and insignificant, because at the time of the dredged material placement and/or its drying, the site would be unpopulated. In addition, the SEIR/S states that exterior levees would be constructed at a sufficient distance from surrounding improvements so that in an event that a failure occurs resulting from an earthquake, they will not be affected.

These conclusions appear premature without specific details of the levees and its relationship to the adjacent features: the San Leandro Wastewater Treatment Plant and Doolittle Drive. We recommend that details and sections of the levees in relation to the wastewater treatment plant and Doolittle Drive be provided in the SEIR/S. Failure of a levee near these facilities would have a significant impact in the function of the City's wastewater treatment, traffic on the streets, storm drain system and/or other utilities serving the general public in San Leandro.

- 3 ↑ Mitigation measures should include construction and engineering measures beyond the minimum standards for levees. Mitigation measures may also include the design of a secondary containment system in the event the primary levee failed.

4. TRAFFIC

- 4 | The SEIR/S states that no significant transportation impacts are anticipated from the use of Galbraith. This conclusion appears to have been derived without conducting a traffic study. We recommend that a traffic study be conducted to demonstrate whether or not 19,000 round trips of 14 cubic yard trucks transporting 12 cubic yards material at a time for the containment dike will have no significant impact to the existing traffic volumes on Doolittle Drive. A similar traffic study should be performed on the anticipated truck traffic bringing topsoil to the site after the dredged material is dry.

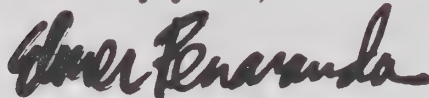
- 5 | We also recommend that a traffic index be determined for the proposed truck traffic on Doolittle Drive. Calculating the proposed traffic index will determine whether truck traffic will exceed the design of the existing pavement on Doolittle Drive.

5. CLOSURE OF THE LANDFILL BENEATH GALBRAITH

- 6 | The Galbraith Golf Course is built on top of an old landfill. The permitting process and closure requirements for the landfill by the California Integrated Waste Management Board are not included in the SEIR/S. We recommend that this issue be addressed.

If you have any questions, please call me at 510-577-3495.

Sincerely yours,



Elmer Penaranda
Assistant Planner

cc: Mike Oliver
June Catalano
Steve Emslie



DEPARTMENT OF PLANNING

575 Administration Dr., Room 105A ■ Santa Rosa, California 95403 ■ (707) 527-1900

Kenneth L. Milam, AICP
Planning DirectorJames P. Olmsted, Jr.
Assistant Planning Director

May 11, 1994

Port of Oakland
Environmental Department
530 Water Street
Oakland, CA 94607

Attn: Ms. Jody Zaitlin

Dear Ms. Zaitlin:

Thank you for requesting our comments on the Draft EIR/EIS for the Oakland Harbor Deep Draft Navigation Improvements. We recognize the importance this project has to assure the Bay Area's long term competitiveness in international trade. We are relieved that the City of Oakland has had the foresight to improve its harbor facilities in a way that no other Bay Area jurisdiction has.

We also note that two of the proposed dredged sediment disposal sites are located in Sonoma County. The Sonoma Baylands wetland restoration project is one that Sonoma County has long awaited and, pending the analysis of dredged sediment constituents, has supported as being consistent with the Sonoma County general plan. The Leonard dredged sediment drying/hauling project is one that has more recently been proposed, more as a spectre than as a solid, real opportunity as far as Sonoma County is concerned. The analysis of this project in the Draft EIR gives us even more cause for concern. We believe the Leonard project would require an amendment to the Sonoma County general plan and a use permit. 1

Our primary concern regarding the Sonoma Baylands project has been over soil contamination due to the constituents of the dredged sediment and ultimate failure to convert this site south of the railroad tracks to saline wetland. We are satisfied as far as the EIR analysis went that the dredged sediment is relatively safe for use for wetland conversion. 2

The Leonard project, however, would irreparably convert agricultural land to a quasi-industrial use. The soil type on the Leonard site is Reyes silty clay, a Class IV soil with a Storie Index Rating of 45. There are many Class III soils whose Storie Index Rating is not that high; so, this must be considered a good, productive agricultural site. 3

As noted in the Draft EIR, there would be a substantial loss of seasonal wetland as well as loss of agricultural land. The creation of wetland, as suggested in the Draft EIR, on the north side of Highway 37 east of Lakeville Highway could have a negative impact on agricultural production potential. 4

The drying and hauling of up to 1.5 million cubic yards of dredged sediment on the Leonard site would also have substantial and adverse impacts on visual and traffic. The proposed mitigation for the 7.5 foot berm along Highway 37 has questionable merit in actually mitigating the adverse visual 5

Jody Zaitlin
May 11, 1994
Page 2

5 ↑ impact. The introduction of 96 truck trips per day for a period of 4.2 years hauling dried sediment from the Leonard site could also have adverse impacts even if the truck trips avoid peak hour traffic.

The Leonard project is difficult to classify in general plan or zoning ordinance terms. There is no provision in either document for drying dredged material and then hauling it away either to the Redwood Sanitary Landfill or to any other location. The use is clearly not agricultural and is not consistent with the LEA land use category or zoning classification. The Draft EIR also points out that BCDC has designated the Leonard site as a 10 to 30 year dredged spoils receiver site. We are happy to learn of this designation but we believe it cannot be used for this purpose without amending the County general plan and having this use approved by the County through a zone change and a use permit procedure.

We thank you again for specifically requesting comments from our office.

Sincerely,



Richard Lehtinen
Senior Environmental Planner

:fmw

c: Supervisor Harberson

MTC **METROPOLITAN** **TRANSPORTATION** **COMMISSION**

April 5, 1994

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Jody Zaitlin
Port of Oakland Environmental Department
530 Water Street
Oakland, CA 94607

Subject: DSEIR/EIS, Oakland Harbor Deep-Draft Navigation Improvements

Dear Ms. Zaitlin:

This letter contains Metropolitan Transportation Commission (MTC) staff comments on the Draft Supplemental Environmental Impact Report and Environmental Impact Statement for the Oakland Harbor Deep-Draft Navigation Improvements. This project consists of maximum wetland restoration using 5,800,000 cubic yards of dredged material from the construction of navigation channel improvements to Oakland Inner and Outer Harbor.

Mitigation Measures

The "Avoid peak hours" mitigation measure for trucking dredged material to the Redwood Landfill on pages S-8, S-13, S-18, and S-25 should be clarified as no activity during 5-9 AM morning peak hours and no activity during 2-6 PM or 3-7 PM afternoon peak hours.

Transportation and Circulation Setting

Page 3.8-7 line 15, describing the I80/I580 interchange, should be rephrased "replaced with a safer right-hand exit".

Page 3.8-30 line 45 should be Hamilton Army Airfield.

On page 3.8-32 line 16, the input to be provided by the Port concerning the rail facilities should be indicated.

Air Quality Impacts

Footnote A to Table 4.1.3.1-3 should cite the most recent emissions factors, especially since this table projects emissions to the year 2000.

Transportation and Circulation Impacts

Although a 3% V/C increment threshold is acceptable for levels of service A through D, we do not feel that it is always appropriate for level of service E or F. Any increase in traffic over 1% to a facility that is operating at level of service E or F must be evaluated on a case specific basis.

Jody Zaitlin
April 5, 1994
Page 2

- 7 | In addition to V/C ratios on Table 4.8.3.1-4, the volumes and the capacities should be listed explicitly so the reader can see the numerical changes.
- 8 | On the bottom of that same page, number 4.8-8 the phrase "is often used because it" should be deleted from line 37 unless it can be justified, especially for level of service E or F.
- 9 | The levels of service for Maritime Street, Seventh Street, and Middle Harbor Road should be shown on Table 4.8.3.1-6.
- 10 | On page 4.8-17 line 31 morning peak hours of 5 to 9 AM and afternoon peak hours of 2 to 6 PM or 3 to 7 PM should be specified.

Land Use Plans and Policies

- 11 | The discussion of the San Francisco Bay Area Seaport Plan on lines 23 through 37 of page 5-2 should be moved to the previous page under the Regional heading of Section 5.1. Following those two relocated paragraphs, reference should be made to the fact that in addition to the San Francisco Bay Area Seaport Plan, MTC is also responsible for the Regional Airport System Plan, since this has relevance to the Galbraith site.

Mitigation Monitoring Plan

- 12 | State law requires lead agencies to submit to MTC their monitoring plans for any adopted mitigations for regional transportation system impacts. Please let us know if you make any changes to the draft mitigation monitoring program included with the DEIR. Otherwise, we will assume that the draft mitigation plan will be adopted by the Port in conjunction with finalization of the environmental documents.

Thank you for the opportunity to comment on the Supplemental Draft Environmental Impact Report and Environmental Impact Statement. I look forward to receiving the Final Environmental Impact Report. In the meantime, if we can be of any assistance, please do not hesitate to call.

Sincerely,



Marc F. Roddin
Manager of Seaport/Airport Planning

MR:rbp
Dsk 3:L-J. Zaitlin 4/94

cc: Commissioners Campbell/Siracusa/Spering/Withrow
John McCallum
Craig Goldblatt
CEQA Binder

April 28, 1994

Mr. Roger Golden
US Army Corps of Engineers
San Francisco District
Environmental Branch, CESP-N-PE-R
211 Main Street
San Francisco, CA 94105-1905

SUBJECT: Oakland Harbor Deep-Draft Navigation Improvements
Draft Supplemental Environmental Impact Report/
Statement (DSEIR/S)

Dear Mr. Golden:

Thank you for the opportunity to review the subject project. The District has the following comments related to the impacts of the proposed project on the facilities and operations of the District's Wastewater Department.

The District's Wastewater Department owns and operates facilities in the project area. The proposed dredging activities do entail the risk of damaging a submerged sewer that flows into the District's Pump Station K. This sewer is located in the area shown in Figure 2.2-1 on page 2-2. Section 4.2.6 on page 4.2-15 should address both the impacts to water quality should this wastewater pipeline be damaged and as a construction impact requiring mitigation to prevent damage to this pipeline. 1

On page 3.7-3, in Section 3.7.3.6, second paragraph, the current rate for the use of reclaimed water should be revised to \$0.77/hundred cubic feet. The second paragraph should also state that the District, the City of Oakland, and Ransom-McKay Golf, Inc., currently have a long-term agreement stipulating that a minimum amount of reclaimed water be used at the golf course. 2

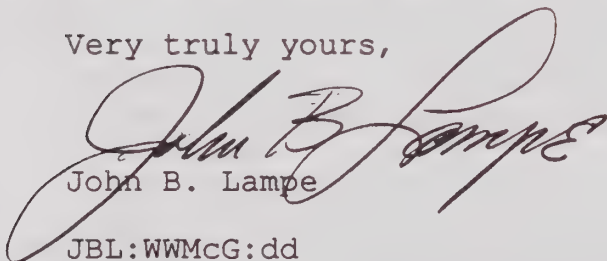
On page 4.7-4, under Section 4.7.4.6, a discussion of the economic impacts to the dredging project because of (1) the minimum reclaimed water use requirements, and (2) provisions for the transfer of outstanding project debt within the tri-party agreement mentioned in the previous paragraph should be included. 3

Mr. Roger Golden
April 28, 1994
Page 2

- 4 | On page 5-14, under Sections 5.3.6.1 and 5.3.6.2 on the affected environment and the project impacts at Galbraith Golf Course, the details of and impacts on Galbraith Water Reclamation Project should be included. The mitigations for these impacts should be included on page 5-16, Section 5.3.6.3.
- 5 | On page 10-12, under Cumulative Impacts, impacts to the use of reclaimed water at the golf course should be included in the cumulative impacts and the need to find other locations for use to fulfill the conditions of the agreement between the District and the golf course operator.
- 6 | On page 11-1, the reclaimed water facilities should be included in the discussion of water supplies in the project area.
- 7 | On page 13-2, under Interagency Coordination, necessary coordination with the District and the City of Oakland to renegotiate the agreement for the reclamation project should be included.
- 8 | On page G-4 of the Appendices, under Section G.1.1.8, and on pages G-12, 13, under Section G.2.2.8, the District's reclamation project and the subsequent coordination with the Port should be discussed.
- 9 | On page I-9 and Appendix J, mitigations should be added to the summary list for the Galbraith Water Reclamation Project.

If you have any questions, or if the District can be of further assistance, please contact Dan Kimm, Associate Civil Engineer, Wastewater Department, at (510) 287-1622.

Very truly yours,



John B. Lampe

JBL:WWMcG:dd
9414.wp6

EAST BAY REGIONAL PARK DISTRICT

May 4, 1994

BOARD OF DIRECTORS

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Ms. Jody Zaitlin
Environmental Department
Port of Oakland
530 Water Street
Oakland, CA 94607

SUBJECT: DRAFT SUPPLEMENTAL EIR/EIS, OAKLAND HARBOR
DEEP DRAFT NAVIGATION IMPROVEMENTS

Dear Ms. Zaitlin:

The East Bay Regional Park District has reviewed the subject document and offers the following comments.

The discussion of impacts on Biological Resources for the Galbraith Golf course disposal option should be augmented. It should include an evaluation of dredge spoil barge and tug boat activity which would affect thousands of overwintering shorebirds and waterfowl which use San Leandro Bay and the waters around Oyster Bay Regional Shoreline. If this impact is judged to be significant, a seasonal restriction upon barge and tug boat activity in San Leandro Bay may be appropriate. 1

The EBRPD concurs with the evaluation of the noise effects upon wildlife from dredge pumps (page 4.4-45, paragraph 3) based upon the assumption that the engines would be adequately muffled to mitigate possible effects. 2

The EBRPD will be pleased to work with the Port to minimize the disruption to public use of the Martin Luther King Regional Shoreline if the San Leandro Bay locality is chosen for pumping dredge spoils to the Galbraith Golf course. The EBRPD will also be pleased to work with the Port when the Galbraith Golf Course is reestablished and hopes to incorporate a regional trail connection between Oyster Bay and Martin Luther King Regional Shorelines into that redesign. 3

Very truly yours,



T.H. Lindenmeyer
Environmental Specialist
c:galbraith.eir



**Oakland/Alameda County
Black Chamber of Commerce**
Serving Since 1974

April 14, 1994

Ms. Jody Zaitlin
Environmental Department
Port of Oakland
530 Water Street
Oakland, CA 94607

Dear Ms. Zaitlin:

- 1 On behalf of the board of directors and members of the Oakland Alameda County Black Chamber of Commerce, I write in support of the Port of Oakland 42 Foot Dredging Project.

As African American businessmen and businesswomen in the East Bay, we have a significant stake in the continuing growth of the Port. It is critical to our survival and success, as entrepreneurs and investors, that the East Bay Economy recover and thrive. Growth at the Port generates billions of dollars of economic activity, and our members are continuing to pursue strategies for increasing our share of the economic pie.

We also have a stake in the maintenance of a healthy environment. I have reviewed on behalf of the board both the Draft Supplemental Environmental Impact Report and the Human Health Risk Assessment for disposal of sediment at Galbraith. The impacts of the Project are sufficiently mitigated as indicated in the DSEIR, and the health risks are negligible.

The City and Port of Oakland, as well as the entire regional economy, have been waiting too long for this Project to move forward. The past delays have not only cost the Port millions of dollars, but they have denied the business community the economic benefits of the expanded activity at the Port. It is time to move the Project forward.

Sincerely,

Oscar J. Coffey, Jr., L.L.D.
President/CEO

ojccoffey\wp\ojc021.doc

BAY AREA COUNCIL

■ 200 Pine Street, Suite 300
San Francisco, CA 94104
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FAX (415) 981-6408

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Ex Officio
ANGELO J. SIRACUSA
President & CEO
Bay Area Council

April 25, 1994

Ms. Jody Zaitlin
Port of Oakland
530 Water Street
Oakland, CA 94607

Dear Ms. Zaitlin:

The Bay Area Council believes that we need to establish a regional dredging policy that will protect and enhance our ability to reach our potential for maritime development.

I write this letter specifically to support the Port of Oakland's 42-Foot Dredging Project. Specifically, the Bay Area Council endorses the Preferred Alternative-B2, that is recommended in the Draft Supplemental Environmental Impact Report. That Alternative, as analyzed in the DSEIR, does appear to be the most environmentally preferred alternative. The restoration of a wetland in Sonoma County is clearly a beneficial use of the clean sediment from the Oakland channels. The willingness of the Oakland community 1) to accommodate a major portion of the sediment within their community, and 2) to sacrifice a popular golf course for several years certainly demonstrates how critical this project is to Oakland. The balance of the material going to an approved ocean site completes the disposal scenario for the Project.

The Port and the Corps of Engineers have completed a thorough analysis of the impacts, and they have both worked with the Long Term Management Strategy (LTMS) effort to identify an array of dredged disposal sites that can accommodate Bay Area dredged disposal for the next 50 years. This cooperative effort with the multiple regulatory agencies and the environmental groups demonstrates the Port's good faith effort to seek consensus on sediment disposal.

The Bay Area Council is pleased to express its support for the work of the Port of Oakland and the Corps of Engineers in developing a sound plan for disposal and a thorough environmental document.

Sincerely,



Angelo J. Siracusa
President

AJS:mvn

M-195

■ The Bay Area Council, established in 1945, is a business-sponsored organization dedicated to analysis and action on regional issues. Its program currently focuses on economic stability, growth management, housing, transportation, and education and training. The Council co-sponsors the Bay Area Economic Forum.

CALIFORNIA TRUCKING ASSOCIATION

EXECUTIVE DIRECTOR
PORT OF OAKLAND

APR 11 1994

April 7, 1994
West Sacramento

Charles R. Roberts
Executive Director
Port of Oakland
P.O. Box 2064
Oakland, CA 94604-2064

Dear Mr. Roberts:

- 1 | California Trucking Association fully supports dredging the Oakland Harbor at the Port of Oakland. This work is essential if commerce in northern California is to grow. Without the proper depth to handle the newer, larger draft vessels, the shipping community will go to other competitive ports. It is urgent that the current U.S. Army Corps of Engineers' plan be completed on a timely basis and at least cost.

This industry urges you to move ahead quickly on all Corps' recommendations. Please contact Gordon Kirby in our Hayward office (510/783-3870) if CTA may be of further assistance.

Sincerely,



Karen Rasmussen
Director of Policy

cc: Congressman Ronald Dellums
Senator Diane Feinstein
Senator Barbara Boxer
Mayor Elihue Harris, City of Oakland
Roger Golden, Port of Oakland
Jody Zaitlin, Port of Oakland



M-196

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HAYWARD, CALIFORNIA 94545
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Coastal Advocates

Kathleen Van Velsor, Executive Director

236 N. Santa Cruz Avenue, Suite 237A
Los Gatos, CA 95030 408-395-9116

May 1, 1994

Mr. Roger Golden
Environmental Branch
U.S. Army Corps of Engineers
211 Main Street
San Francisco, CA 94105-1905

Via facsimile

Re. Environmental Impact Report/Environmental Impact Statement
Oakland Harbor Deep-Draft Navigation Improvements

Dear Mr. Golden:

The proposed project to deepen the Oakland Inner and Outer Harbors to a depth of -42 feet to accomodate deep-draft ships relates to Coastal Advocates concern for the excessive modification of inland waterways and contamination of coastal waters through dredging and disposal of dredged San Francisco/Bay Estuary sediments.

The EIR/EIS for the Oakland Harbor Deep Draft Navigation Improvements and its recent draft supplement purport to evaluate all feasible alternatives in order to minimize in-Bay, upland, and open ocean environmental impacts. The project evaluations also assume that the placement of a "superport" at this location is fully merited, based on proponent-generated projections of regional economic vitality.

However the referenced environmental documents have not fully evaluated all economic, environmental and maritime planning strategies that are available to the Port of Oakland. Some of these strategies include:

- Contaminated sediment treatment technologies to reduce toxic loadings
- Port sharing arrangements to facilitate use of deeper zones in San Francisco Bay (where dredging needs are diminished).
- An evaluation of commercial shipping fleet characteristics to determine where dredge "savings" can be achieved through a ship selection process.

1

2 | The authors of the EIR/EIS prematurely rely on an assumption that a MPRSA Section 102
ocean dumpsite will be designated, although site designation has not yet occurred.

3 | The full volume of dredged sediments planned for ocean disposal is not spelled out in the
documentation. Because final volumes are vague and a full sediment contamination
characterization is missing from the documentation, it is impossible for the reader to conclude that
your assessment of potential environmental impacts in the marine environment is adequate.

We look forward to receipt of the Final Supplemental EIR/EIS and a transcript, if it is
available, of your recent public hearing on this matter. Please let our office know of the cost of
these materials in advance of sending.

Sincerely,



Elaine Martin for Coastal Advocates



Golden Gate Audubon Society

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Americans Committed to Conservation • A Chapter of the National Audubon Society

April 29, 1994

U.S. Army Corps of Engineers
Environmental Branch
211 Main Street
San Francisco, CA 94105-1905
ATTN: Roger Golden

Port of Oakland
Environmental Department
530 Water Street
Oakland, CA 94607
ATTN: Jody Zaitlin

RE: Draft Supplemental Environmental Impact Report/ Environmental Impact Statement (SEIR/ S), Oakland Harbor Deep-draft Navigation Improvements

Dear Sirs and Mesdames:

The Golden Gate Audubon Society recognizes the need for certain levels of dredging. One fault of this SEIR/ S, however, is that no analysis has been made on actions that can be taken to reduce this need.

The deep draft of newer ships necessitates much of the dredging that is the subject matter of this SEIR/ S. One alternative could have been a policy alternative that questioned the economic value of these new ships versus the environmental damage resulting from the dredging required to support them. We understand that soon the Panama Canal will be too small for the larger size ships. The creation of a new canal or expansion of the present canal would have far reaching environmental impacts as does the dredging and dredge spoil disposal problems faced in the SEIR/ S under discussion. Such a policy alternative would have given our decision-makers an opportunity to consider future actions they could take to constrain the increasing size of ships and thus avoid future dredging projects necessitated by ever larger ships. Maintenance dredging of course will evidently always be necessary but at least such maintenance dredging is of a much smaller magnitude than the current project.

Our analysis of the draft SEIR/ S will focus on four site locations for dredge disposal; Sonoma Baylands, Galbraith Golf Course, Bay Farm Borrow Area (Borrow Area), and the Leonard Ranch.

1

Sonoma Baylands:

Our major concerns regarding this alternative dredge disposal site are 1) the likelihood that the wetland restoration project will fail and 2) lack of mitigation for the destruction of approximately 56 acres of seasonal wetlands.

1) Included with our letter is a sixteen page analysis of the tidal wetland restoration project using dredge materials proposed for the Sonoma Baylands site. This analysis was prepared by Philip and Florence LaRiviere of the Citizens Committee to Complete the Refuge, submitted to the Army Corps of Engineers, April 25, 1994.

2 | In their analysis it becomes clear that there is a very good chance that the tidal restoration project will fail because of inadequate tidal exchange resulting from miscalculations regarding the height of the high tidal marsh that surrounds the Sonoma Baylands site. If their calculations are correct, and the evidence is quite strong that it is correct, tidal exchange resulting from the proposed project will take place no more than times 91 during the year, and this exchange will be minimal when it does occur. This is clearly insufficient to produce a healthy tidal marsh. Instead, the evidence suggests that a stagnant pond is the most one can hope for.

On the other hand, the LaRivieres believe that if a channel is dredged through the outlying marsh connecting the Bay to the to-be-created breach in the Sonoma Baylands levee then the restored wetlands would be subject to tidal ebb and flow on approximately 448 times during the year.

This channel must dredged immediately as part of the project rather than relying on its creation by tidal scour action since the lack of tidal activity under the present plan would severely limit such tidal scouring.

We ask that the Final SEIR/S respond to the LaRivieres' calculations. We ask that a detailed analysis be made of their results and that the Final SEIR/S explain how the Sonoma Baylands tidal-restoration project will work if their calculations are correct. If you determine that their calculations are incorrect we ask that the Final SEIR/S explain how they are wrong. If the LaRivieres conclusions are correct we ask that a new tidal-restoration plan be submitted that takes this analysis in to account.

3 | 2) We are very concerned over the lack of mitigation or compensation for the proposed for the loss of 55 acres of seasonal wetlands (The loss of seasonal wetlands may be 31 acres if some seasonal wetland restoration is included in the project.)

The SEIR/S states that "Because the project would result in a net increase in wetland values and area, the conversion of these habitats is considered a substantial beneficial impact (pg. 4.4-41)."

We disagree. It is well known that seasonal wetlands and tidal marsh wetlands provide very distinct and different habitat functions to shorebirds and waterfowl.

Waterfowl such as ducks will feed in tidal marsh vegetation when it is submerged by high tides. During very high tides and storms these birds will retreat to ponded seasonal wetlands where they can find roosting sites and continue feeding.

Shorebirds feed on the mudflats adjacent to the tidal marshes and then retreat to ponded seasonal wetlands during high tides and storms in order to

continue feeding. Smaller shorebirds feed up to 18 hours a day. Because high tides cover the mudflats for many of these 18 hours, seasonal wetland provide an essential alternative feeding habitat.

The very existence of shorebirds and waterfowl thus appears to depend on having both tidal marsh and seasonal wetland habitat types present.

Tidal and seasonal wetlands are distinct habitat types and the creation of one type does not compensate biologically for the loss of the other.

While one can argue over the significance of the amount of waterbird use to be found on the Sonoma Baylands site, one cannot claim that the creation of tidal wetlands will provide the same habitat values the seasonal wetlands provide.

In terms of the latter question, the significance of the value of the Sonoma Baylands site's seasonal wetlands to waterbirds, several comments may be made. The SEIR/S states that "...Considering the relative short duration of ponding on the site, the value of the seasonal wetlands as feeding habitat for migratory waterfowl and shorebirds is low (pg. 3.4-39)." 4

Such a conclusion can be challenged. Few censuses were made on the site. While waterbird use was often low, it was quite high immediately following large rainfall events. Most of the census was performed during drought years. Combining these two facts suggest that if the Bay Area experienced several years of average or above average rainfall years the bird numbers would rise significantly.

Secondly, the Sonoma Baylands site is by no means an unusual Bay Area seasonal wetland. Most of our seasonal wetlands are farmed, drained and otherwise altered and degraded. It is for this reason that all seasonal wetlands must be assumed to provide significant habitat value. It is only through their cumulative habitat functions that the North Bay can support the number of waterbirds that it does.

Furthermore, if disposal of dredge material through conversion of seasonal wetlands to tidal wetlands proves as attractive as it appears to be, many thousands of acres of seasonal wetlands may be converted to tidal wetlands, throwing out of balance the acreage relationship between tidal and seasonal wetlands.

As a result of this analysis we; 1) ask that a cumulative impact analysis be made of the possible impacts on the ecological balance between seasonal and tidal wetlands in San Francisco, San Pablo and Suisun Bays that would result from the continued alterations of seasonal wetlands into tidal wetlands as a result of dredge disposal; 2) ask that in the Final SEIR/S a clear distinction be recognized between seasonal and tidal wetlands, including the recognition that tidal wetlands functions do not replace seasonal wetland functions and, 3) ask that all seasonal wetland losses resulting from the Sonoma Baylands Project be compensated for by the restoration of seasonal wetlands on adjacent Coastal Conservancy (Sonoma Land Trust) property on a 1:1 ratio. 5

Galbraith Golf Course:

Burrowing owls are definitely on the site and we believe they use the site not only for foraging but are very probably nesting on the golf course. A pair of

owls was seen on the golf course during our 1993 Christmas Bird Count and a pair nested about three feet from the golf course last year. That nesting pair has moved and may well be the pair recently seen on the golf course.

6 No mitigation is proposed for the impacts to burrowing owls. Considering the rapid decline in burrowing owl populations and their listing as a species of special concern we believe that mitigation for impacts to this species is essential.

We ask that further censusing be undertaken to establish whether the burrowing owl is indeed nesting on the site. If so, relocation of the burrowing owl pair must be required and should be done on Airport property or on that Golf Course property not used for dredge material disposal.

7 We are also concerned that the amount of mitigation proposed for the destruction of wetlands on the Golf Course is limited to a 1:1 ratio. Considering the temporal loss of wetland functions and the fact that wetland restoration is often unsuccessful and rarely, if ever, completely replaces all wetlands functions of the destroyed wetland (see *Restoration of Aquatic Ecosystems*, National Research Council, National Academy Press, 1993) mitigation is usually required in excess of 1:1. The Bay Area Audubon Council has a Wetlands Policy that requires wetland mitigation ratios to be at least 2:1. We ask that the Final SEIR/S explain why only a 1:1 ratio is being required. We urge a mitigation ratio of at least 2:1 be added in the Final SEIR/S.

8 We are very concerned that the proposed dredge disposal at Galbraith Golf Course may seriously impact the large pickleweed marsh located contiguous to the south/southwest side of the Golf Course. This is one of the only large year-round pickleweed marshes located in this part of the Central Bay and is an important habitat for blacknecked stilts and other salt marsh species. Our concern is that the deposition of 1.3 mcy of dredge material may cause an alteration of the topography of this adjacent marsh as a result of a mud wave type of action.

9 Since the Golf Course is located on bay mud the deposition of such a great weight of material may well push mud up into the adjacent marsh. We ask that the Final SEIR/S analyze the possible topographical/ geological/ hydrological impacts the deposition of 1.3 mcy of dredge material will have on this adjacent marsh.

10 We are also concerned that the dredge material's decant liquids may move into the marsh and pose toxic risks to the species using the marsh. We ask that the Final SEIR/S analyze such possible impacts.

11 Finally we are concerned over Option A--"Pump Out from San Leandro Bay." From the map (Figure 2.7-6.2) it appears that the pipeline will pass very close to Arrowhead Marsh. The endangered California clapper rail inhabits this marsh. We are concerned that pipeline construction may impact this endangered bird.

12 The Final SEIR/S should answer the questions of 1) How close to the marsh will the pipeline be laid? 2) Will construction of the pipeline impact the marsh or the clapper rail? 3) How sensitive is the clapper rail is to noise and will the proposed 40-45dBA have an impact on this species? The latter question is treated too briefly in the SEIR/S. Have any studies been performed on the rail to ascertain its reaction to noise. The SEIR/S states that since it is already noisy in that location more noise should not have an impact. The real question should be

"will the cumulative impacts of added noise effect the clapper rail?" We ask that this cumulative impact of noise be evaluated.

A careful monitoring plan must be instituted in this alternative to assure that no impacts to the California clapper rail take place. If impacts do occur the Final SEIR/S should propose alternate operation techniques that could be instituted to reduce or eliminate the impacts.

Bay Farm Borrow Area:

We believe that the draft SEIR/S greatly underestimates the resource values of the eel grass beds adjacent to the Borrow area. At a Symposium on the Alameda Naval Air Station held by the Golden Gate Audubon Society and The College of Alameda, Dr. Chris Kidding, UC Hayward submitted striking testimony as to the rich wildlife values of the eelgrass beds. We ask that this additional information be added to the Final SEIR/S and that appropriate weight be given to the importance of this habitat. We believe that the tremendous resource values of the adjacent eelgrass beds make the Borrow Area inappropriate for the disposal of dredge material.

Dr. Kidding's report included the facts that over 12 common fish species are associated with these eelgrass beds. Dr Kidding asserted that Pacific Herring spawn in these beds. Therefore, correct draft SEIR/S at section 3.7.3.3. where it is stated that "There are no known herring spawning grounds near this site."

Larval topsmelt and jacksmelt are found in the eelgrass. Northern anchovy are common around the beds as are shiner surfperch. Dr. Kidding noted that the fish densities in the eelgrass beds were "two animals per square meter on the average at many times of the year...[and are] the highest fish densities ever recorded in California Bays..."

High densities of invertebrates including many crustaceans were also found in these eelgrass beds.

Other speakers at this Symposium made it clear that one reason the Alameda Naval Air Station is host to so many fish eating avian species (California least tern, Caspian tern, brown pelican, etc.) is the nearby presence of rich food resources, i.e., fish. And Dr. Kidding's presentation made it clear that one reason for this rich food source is the presence of the eelgrass beds.

Dr. Kidding also discussed what are the limiting factors for the San Francisco eelgrass beds and the species dependent upon them and his answer was "water clarity itself".

Dr. Kidding suggests that "Because water clarity is the closest correlate...it causes us to recognize and appreciate just how significant the area of San Francisco Bay near the Golden Gate is with its well circulated conditions, possible diluted pollutants that plague other regions of the Bay. The fish from this region are edible, unlike many regions of the Bay..."

The least tern colony at the Air Station may be so successful in part because of the lack of toxicity in their fish prey. Dredge disposal at the Borrow Area may lead to increased toxicity in these fish and this toxicity will be taken up the food chain into the listed species the California least tern and the brown pelican.

Another new piece of information reported at this Symposium , revealed this time by Deborah Jaques-Strong, was that the Alameda Naval Air Station's

16 breakwater is the only known night-roosting site for the pelican in the entire Bay
(this information should be added to the SEIR/S at pg. 3.4-7).

17 Several points should be made from all this information. The first is that at
least two federally and state listed species, the California least tern and the
California brown pelican, are dependent upon fisheries connected with the
eelgrass beds and the Central Bay waters. Therefore we request that The U.S.
18 Fish and Wildlife Service perform a Section 7 consultation on the effects of the
Borrow Area alternative on the feeding grounds of these endangered and
threatened species for the following reasons, 1) possible turbidity impacts and
2) possible toxic impacts.

Dr. Kidding's research suggests that water clarity is critical to eelgrass
bed survival but it was not clear what elements of turbidity or sediments was
the affecting agent, i.e., was it toxics in the sediments or simply the turbidity,
itself.

19 The draft SEIR/S states that, pg. 4.4-16, "The presence of these sediments
suspended in the water column will be limited to the immediate dredging area
and fish will be able to avoid this area." While fish may be able to avoid such
plumes do we know that fish will avoid such plumes? With such great fish
densities in and next to the eelgrass beds and so close to the borrow area can one
be assured that fish will not be impacted.

20 Test modelling indicates that dredge plumes will not go into the eelgrass
beds but test modelling also showed that Alcatraz dredge material would not
mound. How assured can we be that the modelling will replicate reality?

21 A sediment curtain wall is proposed. How effective have these been and
in what kind of currents? The currents at the borrow area and adjacent waters are
some of the strongest in the Bay. Have any other curtain walls been used in
similar currents.

22 To assure accuracy of the dumping of the dredged materials it is proposed
that "Dump position should be established by electronic positioning(pg. 4.2-33)."
We appreciate this requirement but still question how one can assure that no
dumping will ever occur accidentally over the eelgrass beds. Electronic gear can
fail or give incorrect readings. Just one misplaced haul barge load could prove
disastrous to this critical habitat. At the least, a monitor should be on board
every haul barge and monitoring of the site must be on a weekly basis. Eelgrass
bed monitoring should be made on a monthly basis.

With the best intentions in the world, human error occurs. Because just
one misplaced barge load of dredge material could cause significant impacts to
the eelgrass beds. Because of the tremendous importance of this area and its
eelgrass beds to the multi-million dollar herring industry and to fish-eating avian
23 wildlife, including the threatened brown pelican and endangered least tern, we
ask that this Borrow Area alternative be removed from the Preferred Alternative
B2.

Again, if the Borrow Area alternative is left in the final SEIR/S we believe
that a Section 7 Consultation must be performed by the U.S. Fish and Wildlife
Service in accordance with the Endangered Species Act's requirement for federal
actions that may impact endangered species.

Leonard Ranch:

We believe it is premature to discuss this alternative since such a project would necessitate its own EIR/S. | 24

We are concerned that such a project might impact the adjacent Sonoma Baylands project. In fact the use of the Leonard Ranch for toxic dredge material may well invalidate the usefulness of the adjacent Sonoma Baylands tidal marsh restoration project. | 25

Since the disposal material will be toxic, there is the question of whether some toxics might leach through from Leonard Ranch to the Sonoma Baylands wetlands. Some toxics will not become benign through contact with the air, heavy metals for example. This will leave the site forever unsuitable as habitat. It may prove poisonous to the invertebrates that will inhabit the dredge material and those invertebrates will in turn be consumed by the avian species that will be using the adjacent Sonoma Baylands tidal marsh. An analysis of the possibility of bio-accumulation of toxics and food chain impacts must be considered. | 26

We also question whether this use of the site is consistent with the mandates of the Coastal Conservancy and Proposition 70 from which came the funds for the acquisition of the entire Sonoma Baylands site. These legal questions must be addressed. | 27

Montezuma Wetlands

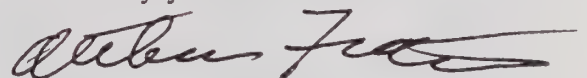
We believe it is inappropriate to discuss this alternative until the Montezuma Wetlands project's own EIS/ EIR is completed and approved. | 28

Ocean Disposal:

While ocean dumping may be an appropriate way to dispose of dredge material we believe that any such program requires much more stringent monitoring than is proposed in the current SEIR/S. We are concerned that the site chosen may lead to increased impacts on avian wildlife. The ocean site chosen was that site with the highest use by avian wildlife of all the ocean disposal sites considered. Greater baseline avian use standards must be established with follow up monitoring to assure no impacts. (The present avian baseline data were based on a variety of studies, many incidental to this project. The result is an information base that does not have the consistency of results necessary for so important an action.) We ask that new avian baseline studies be made before dumping begins. | 29

Thank you for your consideration of our views.

Sincerely yours,



Arthur Feinstein
Program Coordinator



CITIZENS COMMITTEE TO COMPLETE THE REFUGE

453 Tennessee Lane, Palo Alto, CA 94306

Tel 415-493-5540

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April 26, 1994

PLEASE MAKE THIS COMMUNICATION AN OFFICIAL PART OF
THE COMMENTS RECEIVED ON THE SONOMA BAYLANDS PROJECT

Lt. Col. Leonard E. Cardoza
District Engineer
U. S. Army Corps of Engineers
211 Main Street
San Francisco CA 94105-1905

Subj: Additional Response to Public Notice of Feb 23, 1994.
Additional Comments on Draft Assessment, Sonoma Baylands
Wetland Demonstration Project, COE Feb 1994.

Dear Colonel Cardoza,

Executive Summary: In our letter report of March 25 we showed that the existing plan would produce a lake instead of a marsh, because of the small number of tides that would even make it into the site and the absence of a return channel to deep water. We suggested a fix which is described more fully here. In our report of April 8, we included photos of a mitigation project that resulted in such a lake on Tolay Creek, of 15-years standing, illustrating the threat facing the presently conceived project.

In this report, the character of the pickleweed marsh forming a sill bayward of the pilot unit levee is illustrated and a method of dredging a channel across it is described. A dynamic analysis is presented employing more realistic inputs than previously, and an inventory of useful high tides and extended periods of drought in the pilot unit are explored. Error theory is employed to examine the propagation of errors introduced by the uncertainties in tidal prediction, the varying elevation of the outboard sill, and the specified allowable spoil elevation in the unit.

These new considerations, especially the demonstration of the extreme rarity of tides high enough to make it into the unit following breaching, all but guarantee that the marsh restoration part of the planned project will fail. We also look ahead to other problems which must be dealt with if the 300-acre part of the project is to produce a viable marshland habitat for wildlife, and discuss several foreseeable long range impacts on the environment that have not been considered publicly.

With a greatly reduced tidal prism, scour-power has to be weak through the compacted soil of the densely-vegetated pickleweed marsh. Sporadic tidal action in the units, combined with extended periods of drought, militate strongly against the possibility of realizing the vegetation objective within 10 years of breaching the dike.

We conclude that this project as presently planned is a dredging project for the Port of Oakland, with a high probability of

producing a lake for the public, like the nearby Bel Marin Keys mitigation project. The plan is technically weak, glossing over difficult points, and is unsupported by an adequate hydrological assessment which, along with site preparation, is the key ingredient of a restoration effort.

It is in the public interest that public officials and responsible agencies acknowledge the fact that a simple channel across the high marsh bayward sill would maximize the utilization of the available high tides rather than reject most of them as the present plan does.

* * *

Specific points mainly concerning the Corps Pilot Unit:

1. Land fronting the bayward levee. For those not receiving a correction slip to the March 25 report, we have found after talking to professionals familiar with the site and by our photographic flyover at low tide on March 31, that the terrain fronting the bayward levee opposite the 39-acre pilot unit is almost exclusively pickleweed marsh, succeeded bayward by a cord grass marsh, a band of mudflat, and water, all in textbook order.

We mistakenly believed that there was a mudflat above Mean Higher High Water, a most unlikely occurrence. The identification of the pickleweed marsh resolves this discrepancy.

Figure 1, obtained upon request from the Corps, shows the outboard pickleweed marsh crossed by ATV (All Terrain Vehicle) tracks and ditches, probably made by the mosquito abatement people. Straight lines and great swooping arcs looping off to the east under the PG & E boardwalk are so unnatural they indeed appear to be the work of man. The figure also shows the topography along the anticipated drainage path from the pilot unit to deep water.

Figure 2 is an aerial photo (original in color) illustrating the character of the site. This and other photos were taken on March 31 from an altitude of ~1,000 feet, between 10:40 and 11:00 a.m., following the predicted low tide of -0.6 ft MLLW (Mean Lower Low Water) at 10:31. The drainage route in Figure 1 is approximated by the dotted line, from which it can be seen that ebb tides, in order to accomplish any scouring, would be required to debouch onto the plane and go cross-country in a straight line for 500 feet or so before striking any kind of existing ditch!

PN 19651N39 states that "the densely vegetated high marsh 'sill' could restrict tidal circulation in the tidally restored basin...the outboard marshes are thoroughly vegetated and would be over a foot higher than the proposed mudflats....the resistance of the existing marsh substrate...to erosion may be substantial and could retard...enlargement by tidal scour...the high marsh itself may act as a weir".

Prophetic, but now seemingly forgotten. Why?

2. One way to dredge a channel through pickleweed. We turn to a recently Corps-approved project in San Leandro, wherein an existing inadequate channel is to be enlarged between San Lorenzo Creek and Roberts Landing Slough. The Slough runs through a marsh remarkably similar to that in the Sonoma Baylands, at about the same elevation, 4 feet NGVD (National Geodetic Vertical Datum) and about 700 feet in length. The following is quoted from the City's Contract Book for Project NO. 94-8763, bid opening date March 29, 1994:

Contractor shall note that Roberts Landing Slough and the alignment of its proposed connection to San Leandro (sic) Lorenzo Creek are subject to periodic inundation by tidal action. The San Lorenzo Creek connection, in particular, is bordered by sensitive wetland habitat that is to be protected throughout project construction. As a result, use of the proposed channel alignment is the preferred route for excavation and trucking access. (emphasis added).

Provision was also made for periodic inundation. This innovative approach was planned in association with Philip Williams & Associates, who no doubt could describe the equipment required. If this method were employed for the pilot unit, a channel 50 feet wide and about 500 feet long would have to be dug cross-country to connect the breach to the existing small channel seen in Figures 1 and 2, which would also have to be enlarged. The amount of tidal marsh disturbed would be on the order of 1 to 2 acres, in exchange for the potential creation of 39 acres. The spoil would be trucked directly into the pilot unit. The task should be less difficult than the Roberts Landing project because the maximum tidal heights at the Demonstration unit are substantially lower.

3. Additional hydraulics on ponding. The actual elevation of the pickleweed marsh averages 3.66 feet NGVD (not the charitable 3.5 feet used previously) along a swath from the breach site to deep water, paralleling the power lines (see Figure 1). The computer runs shown below also include a roughness factor for pickleweed larger than that used for the previously-assumed smooth mudflat. Breach dimensions were unchanged. No dredged channel is involved here, only the initial conditions described in the Corps' Assessment.

Figure 3 a) is a global view of tide elevations in the ship channel and the pilot pond, over the period 2 - 23 Jan. Striking features here are the half-month absence of any tides high enough to clear the 3.66-foot sill of the outboard levee, and the appearance of the highly-compressed tidal fluctuations in the pond compared to the "full" tidal excursions in the channel.

The tidal signature in the pond can be looked upon as a "damped vibration", i.e., one where the amplitudes and even phase changes (in more complex systems) can be introduced by friction between the water and wetted surfaces, including marshes, breaches, gates, culverts and the like. In this case, the outboard marsh clips off all but the tops of the highest tides, and also establishes the lowest level gravity drainage can produce.

Figure 3 b) shows that the water level in the pond requires several high tides to reach its peak elevation, and Figure 3 c) indicates that the waters continue to recede for some 12 hours thereafter.

Error. The tidal data used above are for 1986, for the sake of convenience, and because the tides are very much alike from year to year. However, the calculations included the height correction from the Golden Gate station to the Petaluma River Entrance, taken from the Bay Area 1994 Tide Calendar published by Tidelines™. The printed value was +0.5 feet, but it should have been only +0.1 feet, the number verified by NOS (National Ocean Service). Thus, high tides on location were overestimated by 0.4 feet, a serious error. Therefore, the heights graphed in Figure 3 should be reduced by that amount. All other developments reported below have been corrected.

4. **Frequency of occurrence of useful tides.** It is instructive to consult a tide table to see how many tides a year would equal or exceed the outboard marsh sill height, and compare them with expectation for the dredged channel described earlier, 50 feet wide, with the sill located at the breach. The results are shown in Table 1.

Table 1. Number of tides high enough to enter the pilot site, for two sill heights.

Critical height at Golden Gate (MLLW)	Outboard marsh sill at 3.66 ft NGVD	Suggested dredged breach sill at 2.5 ft NGVD
	6.2 ft	5.0 ft
Jan 1994	14	44
Feb	8	37
Mar	5	40
Apr	5	28
May	5	32
Jun	7	32
Jul	8	37
Aug	8	40
Sep	4	42
Oct	5	40
Nov	9	37
Dec	13	39
Totals	91	448

The tidal difference correction

- From Tide Table, read high tide elevation for the Golden Gate (MLLW) for the date of interest.
- From Tidal Difference Table, read height correction of +0.1 ft for the Petaluma River Entrance.
- Convert to NGVD by subtracting 2.63 ft.

Result: Golden Gate MLLW - 2.53 = Petaluma NGVD

Or, conversely: Petaluma NGVD + 2.53 = Golden Gate MLLW

Thus, as seen in the Table, reducing the sill to 2.5 feet NGVD would result in the addition of 365 tides per year to the site.

Other detrimental factors cited by at least one expert are 1) the highest tides contain the lowest concentration of marsh-building particles, and 2) the removal of these particles by the fully-vegetated pickleweed outboard marsh is a factor to be considered.

The frequency Table shows so few tides high enough to clear the sill that the true tidal prism at the outset in the pilot unit is very small. Consequently, Williams' estimates of scouring efficacy is probably greatly overestimated, as is particle deposition rate. It follows then that the 10 to 20 year time period estimated for marsh generation is probably not realizable.

The sill height used in the above Table is an average along the path indicated by the Corps for drainage of the pilot unit. The critical height derived for the Golden Gate, 6.2 ft MLLW, is that height that will produce a tide at the site just equal to the average marsh elevation, 3.66 ft NGVD. If it is conceded that a Gate tide of 6.3 ft would probably be filtered out also, then it follows that there will be many, many days during which no tidal action at all will be experienced at the pilot breach:

Maximum Period of no tidal Fluctuation in the Pilot Unit (starting on August 19, 1994)

To end of Aug:	12 days
Useful tides in Sept--none:	30
First 5 days in Oct--none:	5
Total days without exchange:	47

The spoil in the unit will be under a "dead" layer of water because of the high sill, so the mud will not dry out. But the tidal prism will be zero for 47 days. What would grow under these erratic conditions?

As for the main unit, which we have not studied in detail for lack of information, the Corps ditch measurements at the breach give a cross-

sectional area of 19 sq ft serving 309 acres, or 16 acres per sq ft. The pilot numbers are 2.5 sq ft for 39 acres, which is also 16 acres per sq ft. Thus, the initial conditions are about the same for both sites.

5. The problem at a glance. Figure 4 parts a) through c), are "snapshots" of the water levels on both sides of the levee at several stages in the pilot unit. The Corps plan, after the construction of levees, weirs etc., describes 2 months of filling the site with mud, followed by 6 months of gravitational settling to an elevation of 2.0 feet NGVD. Figure 4 a) illustrates the initial conditions before the levee is breached. The Figures represent a longitudinal section through the breach, normal to the bayward levee. Elevations are drawn to scale.

In Figure 4 b) the unit has been filled by several favorable tides, and is shown drained down to its minimum level, determined by the high marsh sill. Mud and water are depicted slumped into the deep breach, where they lie "dormant".

Figure 4 c) shows the maximum water level attainable in the pond. This is for an extremely high tide of 7.3 ft MLLW at the Gate, which occurs exactly once in 1994. The dotted line indicates a head loss of about 1/2 foot. The active tidal prism, the source of marsh-building sediment, is $4.3 - 3.66 = 0.64$ ft. At all other times, the range would be smaller, going right down to zero. The average or effective prism for a month, say, has to include in the average all the zeros that might occur.

Next, the situation with a dredged channel is considered. As proposed earlier, the suggested channel is 50 ft wide at the breach, matching the breach width. The sill is set at a shallow 2.5 ft NGVD in order to prevent the loss of spoil from the unit. For ease of calculation, the width was maintained all the way to the water, terminating at -8 ft NGVD. In practice, the width can vary as long as the cross-sectional area is maintained, and a terminus at MLLW (-2.63 ft NGVD) is probably sufficient.

Figure 5 a), drawn again for the highest tide of the year, now shows the maximum level attainable almost matches the tidal elevation in the channel. In Figure 5 b), the tide has drained down to the 2.5 ft sill at the breach, yielding a range (and active prism) in the unit of 2.2 ft vs 0.64 ft without the dredged channel.

6. The Propagation of Errors. There are uncertainties in the tide tables, in the elevation of the outboard marsh, and in the elevation of the mud in the pilot site. The 95% confidence level is an expression of variability implying that 95% of a set of observations will fall within the specified limits. The means and 95% limits for the project elevations of interest are as follows:

Tide table predictions: Height predicted ± 1 foot (NOS)

Outboard marsh: 3.66 ± 0.32 feet (2 standard deviations on 17 points)

Dredged mud: 2.50 ± 0.50 feet (close approximation to planned limits of 2.0 feet to 2.9 feet NGVD)

When an addition or subtraction is made, the absolute error in the result is equal to the square root of the sum of the squares of the absolute errors. Thus the error in the depth of water over the marsh at the highest tide predicted for 1994 is:

$$(4.8 \pm 1.0) - (3.66 \pm 0.32) = 1.14 \pm \sqrt{1^2 + 0.32^2} = 1.14 \pm 1.05 \text{ feet.}$$

Thus it is possible, but unlikely, that the year's highest predicted tide might top the marsh by 2.19 feet, or by only 0.09 feet. If the lower extreme were experienced, no water would reach the pilot unit at all, and this with the highest tide of the year!

Similarly, the uncertainty in the maximum depth of water attainable in the pond over the consolidated mud base is 1.80 ± 1.12 ft., and the active tidal prism is 0.64 ft, ranging to a lower limit of zero and an upper limit of 1.69 ft, again for the highest tide of the year, occurring exactly once.

It is obvious that the case for scouring in the absence of water is extremely weak.

LOOKING BEYOND THE PILOT UNIT

1. Invasive weeds. Broadleaf pepperweed (*Lepidium latifolium*) stands are prominent on both sides of the Petaluma River channel. As described in PN 19651N39, this weed can impede or even preclude desirable natives. From this standpoint, choosing this site for a marsh-building demonstration is tantamount to building a new house on a termite-infested site. Figure 6, an aerial photo of the outboard marsh opposite the main unit, shows two dense ranks of this weed all along the shoreline. Upland of them another line of unknown composition is faintly visible. The Figure also shows incidentally that the region between the levee and the water is about half-and-half pickleweed marsh and mudflat, at a -0.6 tide. A luxuriant cord grass marsh borders the mudflat. Channel markers and the channel itself are also visible.

2. Hydraulic discharge of mud into the site. Filling of the entire 348 acre site entails the decanting of 4 times as much water as mud, since typically the solids content of hydraulic dredging is only 20% at best. This water, still bearing the non-settling fine silt and clay component of the spoil, will be decanted through 3 adjustable weirs, presumably to spread out over the outboard marsh and drain into the ship channel. It has been stated by the Corps that no deliberate attempt at channel erosion is planned for this discharge. Has any thought been given to the effects of this procedure on the marsh and the surrounding waterways? Will this increase turbidity in the ship channel and environs? Affect fish?

3. Value of the pilot unit. Ordinarily, a pilot unit or plant serves to uncover the unknowns between the bench and the production process, and the lessons learned are applied to the full-scale case. Here, some aspects of the pilot run and the full-scale effort are

being mounted so nearly simultaneously that the normal function of a pilot run is being compromised. We have even heard that the work on the main unit will precede the pilot unit! Is this a fact? If so, what purpose would this 39-acre fragment serve, permanently walled-off from the main unit, with a marsh-splitting channel of its own? With consolidation, only one such channel would be necessary, saving marsh, time and money.

It would have been instructive to learn just how 10 feet of hydraulically-pumped mud would have come out after 6 months of varying consolidation, depending on particle size distributions and interesting happenings around the convoluted peninsulas. Hydraulic spoil spewing out into a pond of water is a blind operation, yet it is described as critical that the consolidated mud elevation wind up no lower than 2.0 feet NGVD and no higher than 2.9 feet. This is probably where the first failure will occur. If the elevation criteria are not met, what is to be done about it? One person experienced in restoration work opined that grading is necessary to achieve the desired tight specs on elevation. It would appear that this could not be done because the wet mud would not support the weight of the required equipment.

4. Effects of a fully developed tidal prism. Should this ever be attained, the outfall from the main unit will be directed squarely at the ship channel. We think it inevitable that the channel will be affected negatively in some unpredictable way by this perturbation. At Palo Alto, the channel into the former harbor actually shifted direction recently, over a short period of time, for unknown reasons. Also, with the cessation of dredging in the harbor a few years ago, the discharge from a connecting lagoon at low tide has created bars and meanders from bank-to--bank in the former dock area, to the extent of actually creating an island mid-channel, where there was none before.

The Tolay Creek mitigation lagoon diverted so much water from the creek that its upstream reaches dried out. Has anyone looked at the possible affect the Restoration Plan for the entire site might have on the Petaluma River and its upstream water dependent facilities? Is this not a legitimate long range impact that must be considered under NEPA law?

5. The need for a comprehensive monitoring plan. This is a prime requirement to document the progress or lack of progress in meeting the project's objectives as time goes by. It should be written by an independent body, preferably with the aid of an enlightened and experienced citizenry. The Conservancy's claim that some kind of a marsh will be produced in 10 years is characterized by some as "crazy". It may not be crazy, but it certainly is optimistic, given the data that belie the possibility of success.

6. Why is the shipping channel to be dredged not identified? Is it the mouth of the Petaluma River as implied, or is it somewhere along the "across-the-mudflats" channel miles away? It does not appear to be the channel opposite the site, because it is already deeper than the charted depth. Nautical chart #18652 shows a depth of 10 feet MLLW in the vicinity of the power lines, while Corps' measurements

(Figure 1) show a maximum depth of over -15 feet NGVD, which is somewhat deeper than 12 feet MLLW. At the "all-purpose" Bay sedimentation rate of 0.3 feet per year, it would appear that the channel there would not need dredging for another 6 or 7 years.

7. Predator control. There should be a firm commitment written into this project that Cal Fish and Game will institute a program to control the red fox. The presence of this alien predator in the area has been reported by witnesses. With this animal running (or swimming) rampant, a nascent wildlife colony could be wiped out in short order.

8. Corps examples of restoration projects. The Corps Draft Assessment states the present plan was carefully reviewed, citing a Corps restoration project with Salt Pond #3 at Alameda Creek, using dredged material. The implication is that it was successful, whereas in fact, among 3 people queried, one thought it was a success, but noted that CDFG and USFWS had different ideas of what constituted success; the second one thought it was a complete failure; and the third person simply laughed.

Another example of the successful use of dredge spoil cited is the Faber tract in Palo Alto. The facts are that some 200,000 yards of spoil were hydraulically deposited onto this 95-acre tract, producing an average mud depth of 1.3 ft, a mere "skin" compared to the pumping of 10 feet of mud onto the Sonoma tract, that is calculated to consolidate in 6 months to a depth of 7 ft (-5 to +2 ft NGVD). Also, there is no high outboard marsh at Palo Alto between the breach and the Bay. For these reasons, we feel that success at the Faber tract has little application to the Sonoma project.

9. A question of misinformation? Appendix D of the Draft Assessment contains the following: "The proposed project would restore 297 acres of diked, former tidal salt marsh to full tidal action (as measured at +5 feet NGVD)".

When people read "full tidal action", they are prone to think that means "like in the Bay". Such a tide is impossible here because of the high marsh sill, scouring, dredging, etc. notwithstanding.

The apparent clarifier (or disclaimer), "as measured at +5 ft NGVD" is meaningless, since no tides are present at this elevation at the Petaluma Station, only air, provided the extraordinary great tides in January and December of 1983 are discounted.

10. Clapper rail habitat? One of the stated project objectives is to produce clapper rail habitat. Clapper rails live in cord grass. How is cord grass going to be established at Sonoma where elevations are far above those where cord grass normally occurs? Additionally, the tidal cycle promises to be so erratic that it's questionable what plants will be able to grow in that environment.

11. The rehandling facility. Conflicting stories persist about the possible use of the Leonard Ranch by the project. If this is the case, then that is a connection that must be included in the environmental assessment, under NEPA law.

CONCLUSIONS

It has been shown in this series of quantitative evaluations that the Corps' pilot project and the California State Coastal Conservancy 308 acre project have little chance of producing tidal marsh and wildlife habitat in the time frame estimated, if ever, unless the agencies involved acknowledge the basic flaw in the plan.

This project for all its 5 years of research has glossed over the most important consideration of all -- the fundamental hydraulics of the system. No one has challenged it publicly. The Presidential imprimatur, with the endorsement of state officials, is driving all concerned to "fast track" the project, no matter what, to the point of disregarding unpleasant facts and refusing to entertain any criticism that might conceivably delay the project.

Aerial photographs and history of a nearby failed mitigation project have been submitted in mute evidence of the likely outcome of this Demonstration Project: a semi-permanent lake. This outcome can be avoided if a channel is cut across the high outboard marsh to allow tidal waters to both enter and exit the unit, establishing fluctuation and depositing the silt that is the key ingredient of the marsh-building process. This relatively simple, inexpensive and expedient fix would vastly increase the chances of success.

The Corps' project is being strongly promoted as a Tidal Marsh Restoration Project. If this is indeed the case, why can't the time be taken to do it right now? Why is the schedule of the Port of Oakland so dependent on the minute dredge spoil capacity of this 39-acre project?

The Sonoma site is reportedly the best one for this trial, the one most likely to succeed. Many other North Bay properties are being put forward as large-scale spoil disposal sites. If this venture with the best available site should fail, the public will not look favorably on any further such expensive experiments.

Yours sincerely,

Florence M. LaRiviere

Florence M. LaRiviere
Chair

Philip D. LaRiviere

Philip D. LaRiviere
Swamp Physicist

Aerial photos courtesy Herb Lingl Photography
Attachments: Figures 1 through 5
cc: Interested parties





Figure 1. Corps of Engineers' topographic map at pilot unit, showing mosquito abatement ditches, the approximate drainage path and location of cross-sectional measurements.



Hub Ling! Photography

Figure 2. The pickleweed marsh outboard of the 39-acre pilot unit. The dotted line indicates the approximate drainage path.

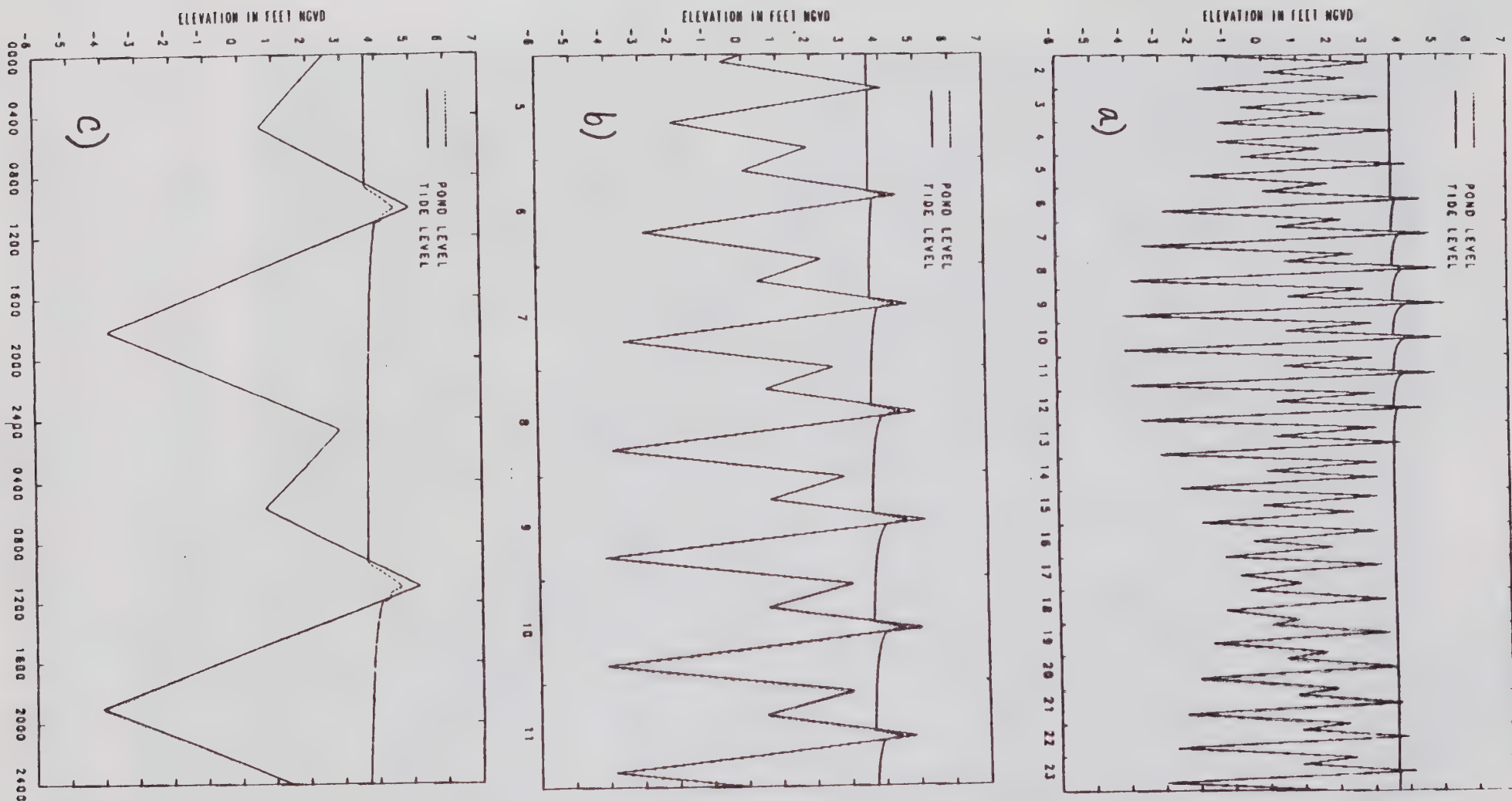


Figure 3. Tidal signatures in the ship channel and the pilot unit, one-dimensional unsteady flow model, 7.5 minute time steps. a) Global view, over the period January 2 - 23. b) Magnified, January 5 - 11. c) Hourly resolution, January 8 and 9.

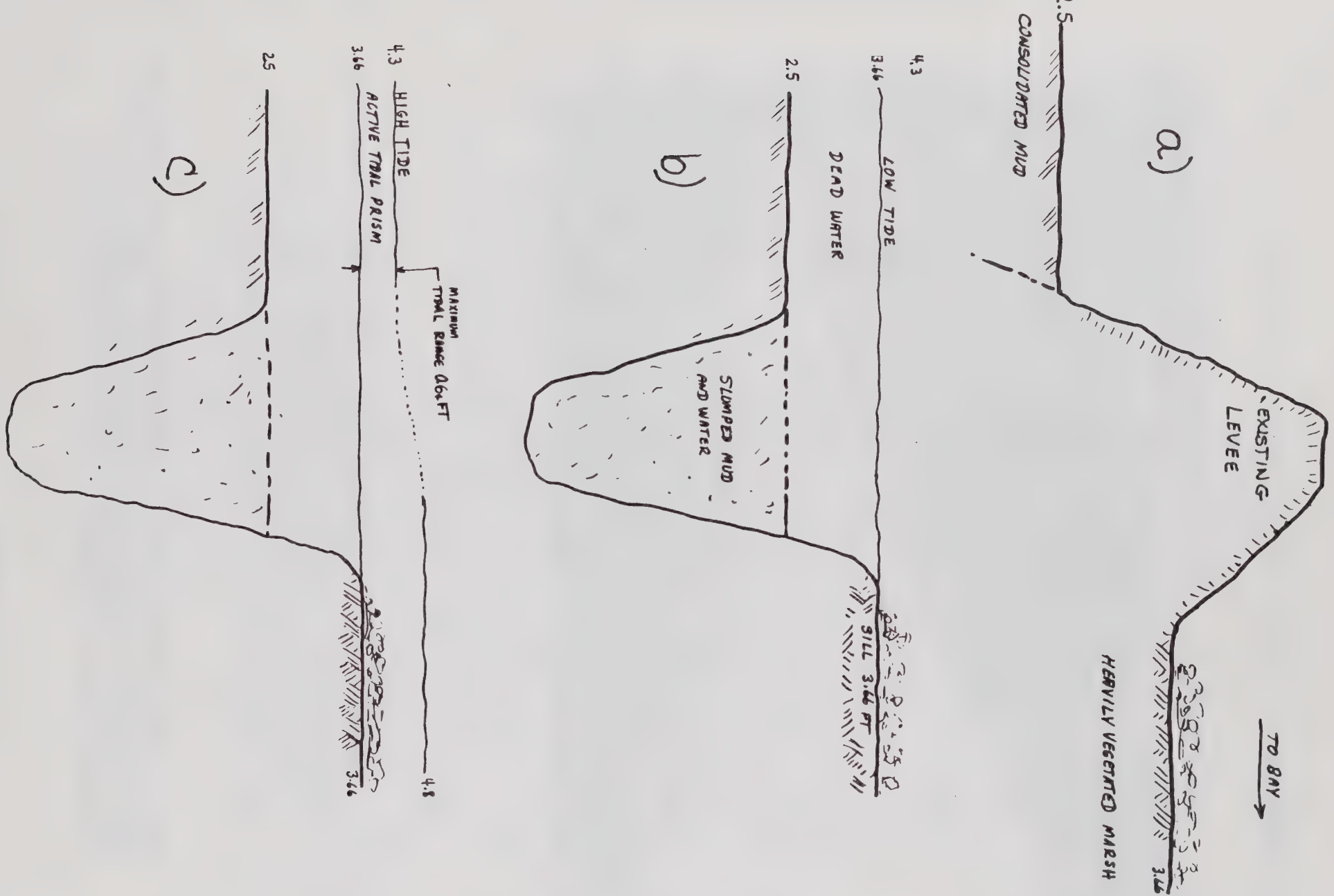


Figure 4. Water levels at different stages, Corps' plan. Initial conditions shown in part a), before breaching. In b) the site has filled and drained. Part c) shows the maximum attainable water level. (Longitudinal sections through breach, elevations drawn to scale)

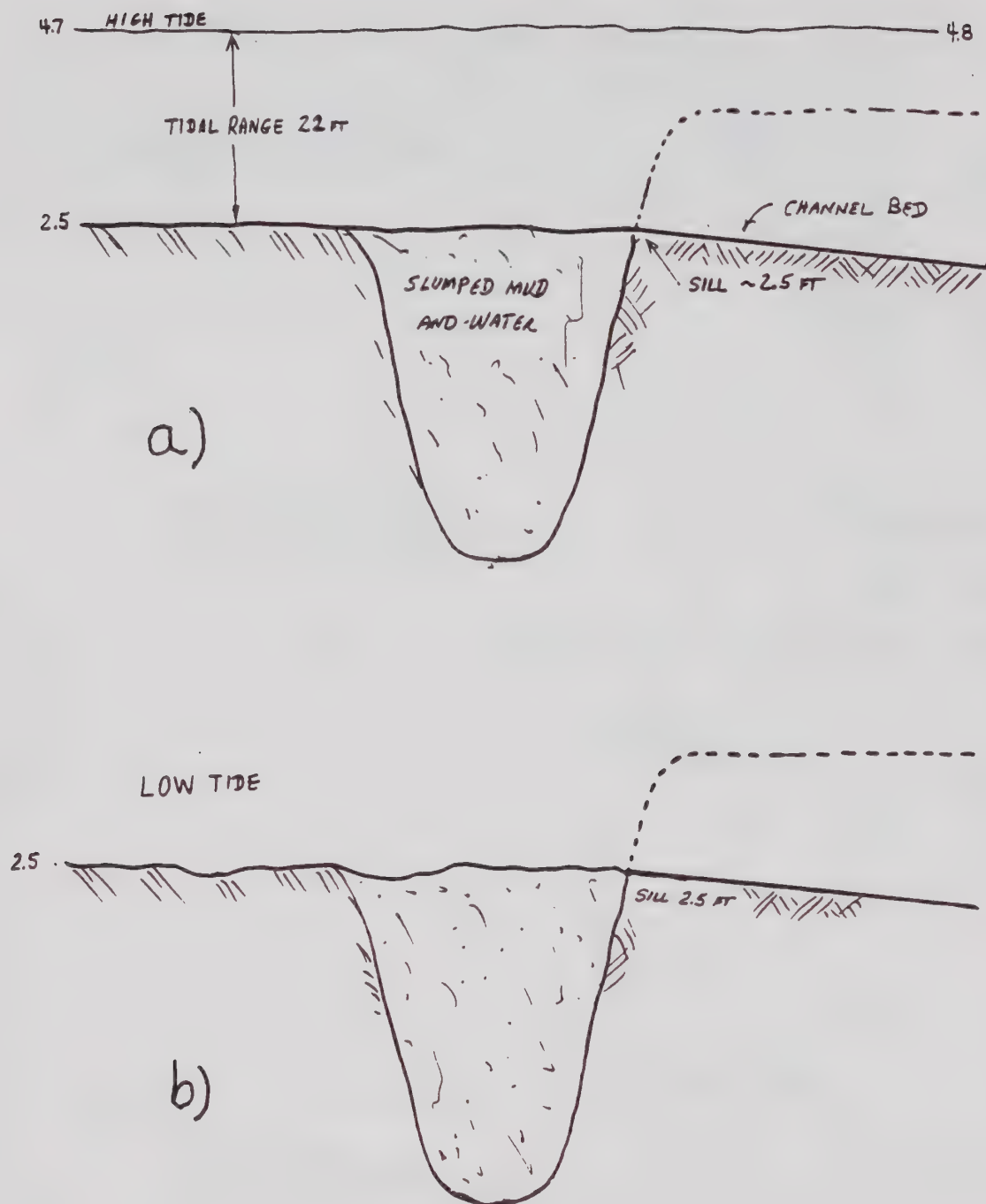


Figure 5. Tidal prism attained with a dredged channel across the high outboard marsh. Highest tide shown in a), low tide in b). sill at 2.5 ft. (Longitudinal section through breach, elevations drawn to scale)



Figure 6. Main site, photographed at a -0.6 ft MLLW tide. The oat field to be filled with mud is at the top. Below the levee, the high pickleweed marsh is prominent, bordered near the water by ranks of broadleaf pepperweed, *Lepidium latifolium*. These are followed by bands of cord grass and mudflat. The waterway can be seen at the bottom, bordered by two white channel markers.



LEAGUE OF
WOMEN VOTERS
OF THE BAY AREA

An Inter League Organization of the San Francisco Bay Area

April 30, 1994

Ms Jody Zaitlin
Environmental Department
Port of Oakland
530 Water Street
Oakland, CA 94607

RE: DRAFT SUPPLEMENTAL EIR/EIS OAKLAND HARBOR DEEP-DRAFT
NAVIGATION IMPROVEMENTS

Dear Ms Zaitlin:

The League of Women Voters of Oakland and the League of Women Voters of the Bay Area appreciate your consideration of our questions and concerns about the Draft EIR/EIS for the 42 foot dredging project. We recognize the importance of this project in assuring the economic viability and competitiveness of the Port of Oakland. We support the needed dredging. The Port and the Army Corps of Engineers are to be commended for offering a spoils deposition plan which is environmentally sensitive.

We do, however, have some concerns about using the Galbraith Golf Course and the 9th Avenue Marine Terminal, as well as the sites in Sonoma and Solano Counties, for dredged spoils disposal sites.

- 1 | While we recognize that the plan is to restore the Galbraith site to a functioning golf course in 5 to 7 years, and that the material would be transported from the 9th Avenue Terminal to a land fill, the potential exists for contamination of these lands and adjacent lands and waters. Contamination could condemn these
- 2 | lands forever to industrial uses. While the Leonard Ranch and Montezuma sites are not currently in agricultural uses, these lands too would also be unsuitable for most other uses if contaminated.

- The Port administers its properties, as do other owners of Bay properties, under the public trust doctrine. In addition to maritime and navigation uses, an important element of this trust is the responsibility to promote recreation and conservation uses. The potential for contaminating any bayland properties is
- 3 | not in the public interest. In addition, we would like to point out that Port property is not subject to the holding costs of private land ownership and is not required (as it a private business) to calculate an internal rate of return on its investments. Although this may seem like 'free land,' it indeed has real economic value.

The primary intent of our questions is to ensure that the use of the proposed disposal sites does not contaminant the lands on which the material is placed or the adjacent lands and waters. We

request that you address the following:

1. Will the dredged sediments emit offensive odors at the time of initial placement and/or as the organic materials decompose over time? What probable adverse odors are likely to be experienced by residents from material placed at the Galbraith site? Could odors also be a problem to residents or workers near Leonard Ranch and Sonoma Baylands sites? Will odors effect residents and businesses to the north of the site and/or restaurants to the south of the site? 4
2. What testing would be done to ensure that runoff from Galbraith, 9th Avenue Terminal and Leonard Ranch are of adequate quality to avoid contamination of nearby wetlands and waterways? Who will establish the standards for this runoff? Who will test the material? 5
3. Best Management Practices and an effluent control basin are relied on to limit releases of sediments and pollutants from the dredged materials at Galbraith and the 9th Avenue Terminal. Which Best Management Practices would be used? 6
4. How would the general plan for the containment system for the Galbraith site function to control and attenuate fluids on the site? Provide a diagram showing the proposed system. 7
5. Describe the existing side wall and subsurface containment structures at Galbraith. How long have they been in place? Have they functioned adequately? Evaluate their effectiveness in protecting the environment from adverse water quality and sediment quality impacts? What is the potential for earthquake damage on subsurface containment structure? 8
6. How long would material be left on the golf course? Evaluate the risk of the weight of the new material causing cracks in the existing containment structure thereby compromising its effectiveness. 9
7. Operating hours from 7 AM to 10 PM are too long. To minimize impacts to adjacent residents and wildlife, we recommend shortening the hours to 8 AM - 8 PM at the louder sound levels. 10
8. The 9th Avenue Terminal is a prime waterfront location; the connection of Lake Merrit to the estuary would run nearby. There is a long term potential for this land to become part of the connection. The following should be included: 11
 - a) A specified time limit for such use.
 - b) A plan to protect the land from contamination, which could prohibit future public use.
 - c) Consideration of the longer term importance and use of the area.
 - d) A plan to remediate and restore the site after the

- 11 | material has been removed.
e) A time line for implementation of the restoration plan.
- 12 | 9. We are particularly concerned about the possibility of contamination at the 9th Avenue Terminal because the overlying asphalt is badly cracked and of undetermined thickness. A containment structure must be required that assures the long term safety and cleanliness of the site, and that assures that the underlying and adjacent lands and waters are not contaminated. This structure should include, at minimum, an impervious layer, measures to assure the material does not migrate from the site and a monitoring and enforcement program assuring that if the material does migrate, that remedial measures are taken in a timely manner.
- 13 | The following should be addressed:
- a) Placement of an impervious layer to assure the material does not seep into underlying soils. Describe how this layer would protect underlying lands? What would it be made of and how thick would it be?
 - b) Side walls that are high enough to contain the materials. How high would they be and what would they be made of?
 - c) Testing that would be required prior to discharge of runoff into the estuary.
 - d) The length of time the site planned to be used to dry dredged material.
 - e) The impact of an earthquake on the impervious layer underlaying the contaminated soils.
 - f) Monitoring for any seepage.
 - g) Monitoring of water resources beneath and adjacent to the site.
 - h) Clean up of any contaminated or hazardous areas that remain after removal of the dried material.
- 14 | 10. If any part of the 9th Avenue Terminal site is built on pilings, the affect of the weight of the dredged material should be addressed. Would the added weight threaten the short or long term integrity of the site? What is the maximum weight the pilings could support? What is the anticipated weight of the dredged materials and water? What effect could an earthquake have on the 9th Avenue Terminal, particularly on those areas used to support disposed materials?
- 15 | 11. Mitigation measures for water and sediment quality impacts focus on measures to avoid contamination. What measures would be taken should contaminated material escape into lands and waters adjacent to the preferred sites, Galbraith, the 9th Avenue Terminal and Sonoma Baylands?
- 16 | 12. What are the risks to the eel grass beds and shallower habitats next to the Bay Farm borrow pit, if the borrow area is used for disposal? How would it be assured that material is

disposed of 400 feet from the edges of the pit so that it would not be carried to adjacent habitats? What other measures could be used to avoid the material being carried to adjacent areas? 16

13. Would the species diversity of the area diminish if the Bay Farm borrow pit were filled or would raising its elevation be a benefit to wildlife? Would the pit be restored to historic elevations? 17

14. Why does the Mitigation Monitoring Plan identify loss and replacement of seasonal wetland at the Galbraith site but not at the Sonoma Baylands site, where more seasonal wetland would be lost? How would replacement of seasonal wetland values at Sonoma Bayland occur? We understand restoration/enhancement is planned for a site to the North. This seasonal wetland plan should be described. 18

15. What increase in local jobs is anticipated as a result of the dredging and disposal project? What kind of new jobs would be provided, in what numbers? Describe how "local" is being defined. Would Oakland residents be the primary beneficiaries of new jobs? 19

16. Use of the Galbraith site would eliminate, at least temporarily, an important recreational resource for residents who are unlikely to be able to afford many other golf courses. Mitigation for this loss is not identified in Appendix J or the discussion. Creation of another course at a nearby location or, conversely, use of another nearby site for disposal of the dredged material, should be addressed. 20

17. A Monitoring Plan, which would assure that the dredging and disposal of the dredged material are accomplished according to permits, should be developed and presented for public review. The Monitoring Plan should, at minimum, address: 21

- a) How compliance with permit requirements, including elevation changes, would be measured.
- b) How pollutant levels in disposed sediments would be evaluated.
- c) How contamination of adjacent water and soils would be determined.
- d) A schedule for frequent review of the monitoring results.

Thank you for considering our comments.

Sincerely,



Katherine Gueldner, President
League of Women Voters of Oakland



Fran Packard, President
League of Women Voters of the
Bay Area



Marin Audubon Society *Box 599* *Mill Valley, California 94942-0599*
April 30, 1994

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RE: EIR/EIS FOR THE OAKLAND HARBOR DEEP-DRAFT NAVIGATION IMPROVEMENTS

Dear Ms. Zaitlin:

The Marin Audubon Society has reviewed the EIR/EIS for the Port of Oakland's 42 Foot dredging project. We appreciate your consideration of and response to our questions and comments. The short list of general comments below, are followed by questions and concerns about specific alternatives:

General

- 1 | 1. Would this dredging project result in an increased number of container ships entering the bay and Oakland harbor?
- 2 | 2. Describe the potential for increased oil spills both in port and in transit, and increased collisions, resulting from larger container sizes and possibly increased numbers of containers.
- 3 | 3. The primary problem for the Port dredging projects is disposing of contaminated material. This will be a long-term problem for the Port of Oakland and for other dredgers as well. What ongoing efforts are underway to locate permanent rehandling facilities? Uplands at Mare Island, adjacent to their disposal ponds, have been identified as a possible site for a permanent rehandling facility. Discuss the status of investigations into the use of this site? Are there any other sites, including as landfills, that could be used?
- 4 | 4. The EIR/EIS should contain additional information on the Monitoring and enforcement plans for each alternative. All options will need to be monitored at least for compliance with water and sediment quality, in the dredged material and on and adjacent to the disposal sites; and to ensure the material is disposed of in accord with permit requirements. The plan should include specific timeliness for reviewing the results of the monitoring. The plan should also address how design, construction or operation defects or problems will be addressed including a time limit for addressing the problems. As you will see from our comments below, we are particularly concerned about possible contamination of habitats adjacent to the disposal sites. To guard against construction problems, contractors contracts should be carefully written to include provisions to protect environmental resources and include provision for high fines for contract deviations that result in environmental degradations.

Specific Comments

Ocean

- 5 | 1. Our concerns about the ocean disposal site are its proximity to the Farallone Islands, the major rookery for pelagic species along the US coast up



A Chapter of National Audubon Society

to Alaska, the lack of adequate baseline data on use of the site by marine mammals and pelagic birds. The number of surveys were not adequate to understand the use of the site by marine mammals and pelagic birds. In addition, except for fish, the data collected were not specific to this site, having been collected for other purposes.

2. In addition, we have a number of concerns about the monitoring program.

Alcatraz

1. Alcatraz Island is a major roosting site for many species of pelagic birds, as well as nesting site for Western Gulls and Black Crowned Night Herons. Would a cumulative impacts of many disposal events at the Alcatraz disposal sites result in a reduction of available prey, foraging opportunities and primary productivity over an extended period of time?

2. Prey species including invertebrates living around the disposal site on Alcatraz and elsewhere around the Alcatraz disposal site cannot avoid the plume. These species at the bottom of the food chain would be expected to be contaminated by the disposed materials. Have there been any studies to support the conclusion that "Biomagnification of contaminants in birds and mammals is expected to be negligible"? If not, discuss the basis upon which this conclusion is drawn.

3. Since this disposed material is carried elsewhere and other material is deposited at other locations around the estuary, the impacts of disposal in the Bay are spread around the Bay. Has there been investigation into the fate of the 13% of material deposited at Alcatraz that does not remain on-site. Where does it go? Perhaps it is causing more adverse impact than it recognized.

Sonoma Baylands

1. The EIR/EIS describes the seasonal wetlands on Sonoma Baylands as being of low quality. What standards were used to make the low value determination? What amount of wildlife use in the EIR preparer's opinion, would warrant a high value determination? What seasonal wetland sites would be considered high value? This contradicts the assessment of the USFWS as stated on p. 3.4-37 "USFWS reports that the seasonal wetlands on site provide important seasonal wetland habitat values for numerous and diverse wildlife species."

2. The project would result in the loss of 55 or 56 acres of seasonal wetland on this site. Habitat and other functions provided by the seasonal wetlands would not be replaced by tidal wetlands. For example, shallow seasonal ponded areas such as exist on Sonoma Baylands provide refuge habitat for shorebirds during high tides when intertidal mudflats and marshes are inundated with tidal waters. The 24 acres of seasonal wetland that would be provided would be located between the RR tracks and the new levee. Whereas the current wetlands are remote and subject only to very sporadic disturbance, species use of the new 24 acres would be disturbed by public access which presumably would occur along the levee as well as sporadically by maintenance vehicles. This, in addition to possible intrusion into the marsh by dogs or people, would lower habitat value. The EIR should explain how disturbance from use of the levee would be mitigated. For example, would a fence or native shrubs and grasses be planted to provide cover habitat and buffer human uses?

3. The project would result in a loss of approximately 30 acres of seasonal wetlands. Where would this acreage be replaced? We understand that the Coastal Conservancy was to provide replacement on the lands north of Hwy. 37. Their plan should be presented and discussed.

4. Was no grindelia found on the site? This special status plant is found in

- 13 | the area and should be on the site.
- 14 | 5. Could the Port's material be used as cover for the Corps' across-the-flats material which have mercury concentrations exceeding 0.4 mg/kg which exceeds not only the RWQCB's screening criteria and the Clapper Rail reproductive threshold. Since the Ports suitable-for-aquatic use material is lower has a lower mercury content, assuming all other constituents are acceptable, this would seem to be a beneficial use.
- 15 | 6. Demonstrate that the breach in the perimeter levee would be adequate to allow sufficient tidal circulation into the Sonoma Baylands tidal marsh. Is the breach as designed sufficient to allow sufficient water into the site to restore a viable tidal marsh. Should there be additional dredging to widen the channel across the existing marsh?
- 16 | 7. What are the Best Management Practices and the erosion and sediment controls that would "eliminate potentially significant impacts of increased sedimentation into adjacent surface waters" (paragraph 2, p. 4.2-48)? Provide an independent analysis of their adequacy.
- 17 | 8. The impacts of increased turbidity and sedimentation during remobilization of dredged material by tidal currents are expected to be short term. What is meant by short-term, several days, weeks months? How could this expected to contribute to increased sedimentation rates in the area?
- 18 | 9. Discuss the potential for the Sonoma Baylands site to be contaminated with constituents exceeding background and water quality standards that could flow or migrate from the adjacent Leonard Ranch site? What remedial measures should be taken if the Leonard Ranch site is used for disposal of contaminated material and an accident occurs?
- 19 | 10. What mitigation measures and monitoring standards are recommended to ensure that lead, copper and tributyltin are not released in levels that exceed water quality objectives? What if the long dilution and long retention time, as discussed on page 4.2-48, are not adequate to the levels of these constituents to below the RWQCB criteria?

Galbraith Golf Course

- 20 | 1. How would it be ensured that Galbraith would be restored to a golf course in 5 to 7 years?
- 21 | 2. The design for the containment system recommended by the RWQCB and now under consideration to attenuate migration of fluids from the site should be shown. Explain how it would function to attenuate lateral migration of fluids?
- 22 | 3. What remedial measures would be taken if an adequate reduction in the leachate fails to occur and the criteria for chromium, copper, lead, mercury, nickel, zinc and TBT are not met? What specific measures would ensure treatment of surface water should it not meet state water quality criteria? If decant water does not meet discharge requirements, we recommend that a treatment program be implemented to ensure that water quality standards are met. Water should not simply be retained on site as indicted on page 4.2-62.
- 23 | 4. Where would decant water be retained until it meets discharge requirements?
- 24 | 5. The potential adverse impacts to soil substrate from accumulation adsorption of heavy metals should be addressed?
- 25 | 6. What if there is a problem with containment levees and weirs? What

- measures would be required to remedy problems? How would it be ensured that breaks or other defects would be remedied immediately? 25
7. Discuss the possibility of avoiding impacts to the shallow fresh water along the eastern boundary of the site. Would it be possible to avoid this section of the site. 26
8. Identify the Best Management Practices that should be used? Evaluate their effectiveness in ensuring that surface runoff does not compromise adjacent soils and water. 27
9. What wildlife species use the fresh-water wetlands at the golf course? 28
10. Is it absolutely certain that no noise impacts could occur, as implied in the discussion at 3.6.4.6, if residences are further than 2,000 feet away? Does the fact that industrial and airport uses surround the site, mean that area residents and workers would not be bothered by noises from this project? Have tests been done to verify the EIR conclusions? 29
11. What would be the source of water used to control dust? Could recycled water be used? The air quality discussion indicates only that the application of water as a soil binding agent "should" reduce the fugitive dust problem? What if it does not? 30
12. What mechanism would ensure that the site would be restored to a golf course within the time stated? 31

9th Avenue Marine Terminal/Landfill

1. Show the design of the facility where runoff would be contained and treated to meet discharge requirements. What treatment measures would be used to bring the runoff into compliance? 32
2. We know of no landfill that treats runoff; sanitary districts treat runoff. Page 4.2-65, 4.2.77 (c) states that runoff from the site would be allowed to evaporate or hauled to a landfill along with the dredged material. What landfill has agreed to take this material? 33
3. What are the RWQCB requirements that ensure no significant impacts would occur from discharge? 34
4. How long would this site be used as a rehandling facility? How would its use as a temporary facility be assured? Are there requirements that could be imposed to ensure it does not become permanent? What uses are being considered for after its use as a disposal facility? 35
5. What Best Management Practices would be used to ensure that sediments and pollutants are not released to adjacent habitats? An independent evaluation of their effectiveness should be provided. 36
6. Would an impermeable layer of some sort be used to prevent contamination of underlying and adjacent substrate and/or waters? If so, describe what it would consist of 37
7. What measures would be taken should there be an accidental discharge of contaminated materials to adjacent waters or soils? 38
8. Identify the source of water for dust control? Could recycled water be used? 39

Bay Farm Island Borrow Area

- 40 | 1. A recent Symposium sponsored by Golden Gate Audubon Society identified a rich and diverse assemblage of fish and wildlife resources in the vicinity of the borrow pit. Components of the habitat, clarity of water, current, eel grass beds, etc., combine to contribute to the exceptional species diversity that includes the largest Caspian Tern breeding colony in Northern California, one of the most successful Least Tern nesting colonies in California, the only night-roosting site for Brown Pelicans in the Bay and a rich assemblage of fish and invertebrates. The Setting discussion should be expanded to clarify whether and/or how species use of the borrow pit area is different than habitats surrounding it. Are there any species that would not exist in the area if the borrow pit were eliminated?
- 41 | 2. The borrow pit seems to provide a different, unique habitat feature that compliments the existing habitats and/or contributes to greater species diversity. Is there any aspect of the borrow pit that is adverse to the ecosystem. For example, are any species harmed by the presence of the pit? Are any wildlife trapped or otherwise adversely impacted if they are in the pit?
- 42 | 3. The major focus of the EIR/EIS is that the material can be contained and not be transported to adjacent habitats. It states that material would not be transported outside of the borrow pit if it is deposited 400 feet from the edge of the pit. How was this figure determined? It seems to us that it would be easy for mistakes to be made. Barges could be unloaded, either unintentionally or intentionally, off the target area. Or the EIR preparers to be wrong in their assessment that deposited sediments would not be transported by currents even if deposited within the 400 foot limit. Either of these circumstances would place adjacent habitats, particularly the eel grass, at great risk. Could disposal within this boundary be guaranteed? If so, how?
- 43 | 4. How the eel grass and other habitats adjacent to the pit be protected from being dispersed to adjacent habitats? We understand silt curtains could be used to prevent the movement of sediments from the pit. Could they be used in this area of the Bay? How would they be kept in place? How effective are they?
- 44 | 5. How could the transport of sediments to the eel grass beds impact this unique habitat? We understand eel grass is very sensitive to turbid waters, and that a major, if not the only reason eel grass does well in this location is because the waters are so clear. Discuss the sensitivity of eel grass to sediments? What level of turbidity can eel grass tolerate without declining? What is the status of eel grass in the bay? Describe the significance of the loss or reduction of these beds be significant?
- 45 | 6. Discuss the impact of the disposal of dredged material and transport of material outside of the pit area on fish and mammals that use the area.
- 46 | 7. Would a trench area be created by leaving a 400 foot wide area between the existing edge of the pit and the disposal area? What impact would this have on fish and other species that use the area?
- 47 | 8. Bathymetric surveys performed monthly could allow large amounts of material to be dumped outside of the target area without notice. More frequent surveys should be done. We suggest weekly or more frequently.
- 48 | 9. A requirement that the lapse of time between completion of placement of contaminated material and final capping be "minimized" (page 4.2-33) is to vague. The length of time should be specified. We suggest that capping be done immediately upon completion of filling of each cell.

Leonard Ranch

1. Would the use of this site as a rehandling facility, be consistent with the mandates of the Coastal Conservancy, Sonoma Land Trust and Proposition 70? 49
2. The assessment is made (page 3.4-33) that the value of the site's seasonal wetlands as feeding habitat for migratory waterfowl and shorebirds is low because "reactively few migratory waterfowl and shorebirds were recorded during censuses." What number of birds were observed? What number would have to be seen for the site to be judged of moderate and of high value? 50
3. During a field trip with many agency staff, Long-billed Curlews, a special status species, foraging on the site's seasonal wetlands. Other shorebirds, including Yellowlegs and Killdeer, were also observed. Peregrine Falcon have been observed foraging on many other North Bay seasonal are also likely to forage on the this site. 51
4. What does the statement mean on page 3.4-36, that the "Planning Director would determine that this project could adversely impact a designated critical habitat area"? The Planning Director of what agency? 52
5. It is not clear whether a cell liner, leachate collection system or perhaps neither would be used. How would this decision be made and by whom? This component of the project should be identified during this EIR/EIS process to allow for public review. We believe that both are essential to ensure groundwater, underlying soils, and adjacent waters and habitats, including the Sonoma Baylands project, are not contaminated over the 30 year life of the proposed Leonard Ranch facility. 53
6. How high is the water table at Leonard Ranch? Wouldn't the effluent percolate through if it is only a few feet or slightly more below the surface? An impervious layer should be placed that would prevent this? 54
7. This alternative relies on "settling" (Page 2-28, last paragraph) to bring the effluent into compliance with water quality criteria. How long would the material have to "settle?" Where would the "separate effluent control basin" be located? What would prevent adjacent waters, soils and habitats from being contaminated by the water as it settles? How long would the retention time be? Page 4.2-40 only indicates it would be long. 55
8. Paragraph four, page 4.2-39 states "if the basin and these measures (stormwater erosion and sedimentation BMPs) are not effective, the effluent water will be recycled into the off-loading slurry water...."? The discussion provides only that if this occurs, the effluent water "...could" (emphasis added) be treated prior to discharge into the Petaluma River." Who and how would it be decided whether the effluent water is to be treated prior to discharge? What standards would be used to evaluate the need for treatment? We strongly recommend that treatment be required if background levels and water quality criteria are not met. If background levels are exceeded for any of the constituents or if RWQCB criteria are exceeded, the runoff should be treated. There is not much industry in San Pablo Bay, and we are very concerned about degradation of existing conditions. 56
9. What treatment measures are appropriate and the most effective to eliminate heavy metals and other constituents that exceed RWQCB criteria and background levels? 57
10. What is the potential for contaminants to accumulate in sediments in the drainage channel to which decanted water is discharged from the drying basin and/or to migrate to adjacent waters and habitats? How would these situations be addressed? 58

- 59 | 11. Show the location and design of the effluent water control basin. How would they function to effectively reduce or eliminate contaminants?
- 60 | 12. What are the background levels in the sediments in vicinity of the Leonard Ranch and Sonoma Baylands sites of the constituents that would exceed water quality standards arsenic, cadmium, copper, mercury, zinc, and tributyltin?
- 61 | 13. What measures would be taken to prevent accidents, such as levee or weir failure? What procedures would be followed to ensure immediate containment of runoff and/or contaminated runoff.
- 62 | 14. Tributyltin should be tested for in order to ensure retention has been long enough to allow degradation. If this element remains, permit conditions should ensure it is not discharged until fully eliminated.
- 63 | 15. Where would the water come from to water down the soil to prevent dust? Could or would recycled water be used? Would it be bay water? If so where would it be taken from and by what method?
- 64 | 16. What are the Best Management Practices that would be required by NPDES permit for construction and post construction activities to control the quality of the stormwater runoff (p. 4.2-39)?
- 65 | 17. What mitigation would be provided for the loss of seasonal wetlands due to conversion of this site to a rehandling facility? How much acreage would be lost? How much mitigation would be provided, in what location and of what type of wetland?
- 66 | 18. What are potential impacts for shorebirds attracted to forage on invertebrates in the drying sediments? Evidence at other drying basins indicates that large numbers of shorebirds and even waterfowl are often attracted to forage and rest on these facilities. If the material being dried were suitable for aquatic disposal, this could be considered a benefit. However, on this site birds would be foraging on soils and in waters that are unsuitable for the aquatic environment because they contain high levels of heavy metals and other contaminants.
- 67 | 19. The potential visual impacts of this alternative should be discussed. This site currently offers long-range views to the Bay which, with the project, would be blocked by a high levee. The impacts of this of aesthetics of the are should be addressed.
- 68 | 20. There are a number of residences just across the river from Port Sonoma. The potential for noise problems was an issue in this community when Skaggs Island was proposed as a dredged material disposal site. Noise carries to this area from as far as Sears Point Raceway. Have sound tests been done that confirm noises from the pumps or heavy equipment would not carry to homes disturbing the residents?
- 69 | 21. Since there has been no environmental review for this option, it would be necessary to produce an EIR/EIS for use of this site as a rehandling facility? How long would it take to complete environmental review? Is this site a feasible alternative considering the the time line for the dredging project?

Montezuma

- 70 | 1. We have a number of questions and concerns about the Montezuma project. However, in order to make informed comments, we need considerably more information than is provided in this EIR/EIS. We need the EIS/EIR for the Montezuma project.

2. Furthermore, because the EIR/EIS for the Montezuma project is not yet released for public comment and will undoubtedly take a substantial amount of time for revisions and to respond to comments, using this site seems like an unlikely option. The primary reason it would be unlikely is that, even if it were found to be an acceptable alternative, its use would delay the Oakland project for some time.

71

Thank you for considering our comments.

Sincerely,

Barbara Salzman, Chair
Conservation Committee

April 18, 1994

Port of Oakland
Environmental Department
c/o Jody Zaitlin
530 Water Street
Oakland, CA 94607

Dear Ms. Zaitlin:

This letter is in response to your request for comments concerning the Port of Oakland environment impact report prepared for the Oakland Deep Draft Navigation Improvement Project.

The objective of this project is to deepen the channel of the Port of Oakland, the inner and other harbors and berthing areas to allow the newer "deeper hulled" ships to use the Port for container traffic. This project will allow more ships to use the Port resulting in more jobs and tax revenue to the city of Oakland.

To deepen the harbor to the depth of 42 feet requires the dredging of 5.8 million cubic yards of sediment. The preferred alternative is to dispose of portions of the sediment in the Pacific Ocean at a location selected by the Environment Protection Agency to restore the Sonoma Baylands and the remainder to be used in the reconstruction of the Galbreith Golf Course in Oakland.

- 1 | The Port/COE EIS/Human Health Risk Assessment has found that the preferred alternative poses insignificant risk to our health and our environment. In view of the results of this very comprehensive study, the Board of Directors of the Oakland Chamber of Commerce recommends that the dredging project which will deepen the Port of Oakland shipping channel to a depth of 42 feet be authorized to commence as early as possible.

The Port of Oakland and the Corps of Engineers have an important job development responsibility, as well as a responsibility to protect our environment. Several million dollars have been spent and over 20 years of time has been utilized in this effort. I think that all will agree that due diligence has been exercised in reference to this project.

Sincerely,



Mary C. Warren
Chairperson of the Board



RADM R. L. Toney, USN (Ret.)
President & CEO



Oakland
Chamber of
Commerce

475 14th Street
Oakland, CA 94612-1903
Telephone: 510/874-4800
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Sabre Yacht Association

2126 Magellan Drive Oakland, CA 94611

March 15, 1994

Ms. Jody Zaitlin
Port of Oakland, Environmental Dept.
530 Water Street
Oakland, CA 94612

Dear Ms. Zaitlin,

We are in receipt of your notice of the availability of a draft Supplemental Environmental Impact Report/Statement (SEIR/S) that has been prepared by the Port of Oakland and the Corps of Engineers, San Francisco District. We have read and evaluated your notice which includes a description of the project to dredge to 42 feet and we have read and understand your plans to dispose of the dredge spoils.

You are to be complemented on your plans to avoid disposal at the Alcatraz site. We have opposed this selection for many years for a number of reasons, the least of which is the consideration of efficiency. Typically, dredge spoils were dumped with little or no regard for currents; when the current is flooding, which happens frequently, much of the spoils are simply swept back into the bay, some of which are swept back to their point of origination. We have always felt this has had a negative impact on the fish life in the bay as well as on the overall project.

In the past we have spoken before your group trying to make our point regarding disposal sights. We would be willing to speak again in support of your new plans. None of us oppose the 42 foot project. We all consider it a necessity. The only issue, in our minds, is the disposal site.

Your present plans should satisfy the Half Moon Bay Fishermen's Association, whom we have supported in the past, all sport fishermen who frequent the bay and outer waters, and the general public. We offer only one additional thought relative to the site question. Now that reality has set in regards to the expense of the project, i.e., hauling the spoils out beyond the Farallons, there may be alternative sites which could benefit from land fill. We are speaking specifically of Frank's Tract in the Delta, which could become the greatest land reclamation project of the 21st century with a little work on the dikes and a few million cubic yards of dredge spoils.....food for thought!

Good luck, and count on us to help you in any way we can.

Kindest regards,



Alan K. Beales
Sabre Yacht Association



San Francisco Bay Area Chapter

NATIONAL DEFENSE TRANSPORTATION ASSOCIATION

710 McDonnell Rd., #310
San Francisco Int'l. Airport
San Francisco, CA 94128-3710

(415) 872-4233

26 Apr 94

Mr. Roger Golden✓
Environmental Branch
U.S. Army Corps of Engineers
211 Main Street
San Francisco, CA 94105-1905

Ms. Jody Zaitlin
Environmental Department
Port of Oakland
530 Water Street
Oakland, CA 94607

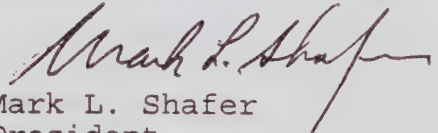
Dear Mr. Golden & Ms. Zaitlin:

1 | The San Francisco Bay Area Chapter of the National Defense Transportation Association (NDTA) supports the Oakland Port Dredging Project. NDTA is an organization of civilian and military transportation interests. The Oakland Project, at long last, will bring the Bay Area into the 21st century of international cargo transportation. Both civilian and military offshore cargo movements will benefit, as well as the total U.S. economy.

We are persuaded that the SEIR/EIS recommended disposal plan is both economically and environmentally sound, and should go forward.

Our recommendation is for the SEIR/EIS to reach final form, and the Oakland Port Dredging Project to be realized.

Sincerely,


Mark L. Shafer
President

mls
cc: Claudia Cua, Chapter Secretary



SIERRA CLUB SAN FRANCISCO BAY CHAPTER

5237 COLLEGE AVENUE • OAKLAND, CALIFORNIA 94618-2111 May 1994

TELEPHONE: 510-653-6127

ALAMEDA COUNTY • CONTRA COSTA • MARIN • SAN FRANCISCO

SIERRA CLUB COMMENTS ON THE DSEIR/EIS Oakland Harbor Deep-Draft Navigation Improvements US Army Corps of Engineers/Port of Oakland, March 1994 (x-y/z refers to Chapter/Page/Line)

The premise of these comments is that the lead agencies for this project, US Army Corps of Engineers (COE) and Port of Oakland (Port), have evaluated an insufficient range of disposal alternatives, specifically, upland canyon Class II solid waste landfills, to be able to determine that deposit of 1.3 million cubic yards of the dredge spoils from the project on the present Galbraith Golf Course (GGC) is an essential element of the environmentally superior alternative.

In addition, the project DSEIR/EIS has not evaluated direct excavation of dredge spoils, deposition in trucks, overnight draining, and direct haul to upland canyon landfills for drying in a containment structure of comparable size to that proposed for the GGC.

The project DSEIR/EIS will be the first user of the Ocean Disposal Site, therefore we wish to incorporate the 28 March letter from the Natural Heritage Institute to Alan Ota of the EPA and the 25 January, 1993 letter from the Sierra Club to the EPA into our comments. copies of these two letters are enclosed. Please respond to the concerns and questions which are in these letters. Your Draft EIS/EIR has done nothing to illuminate answers to our questions about the adequacy of the ocean site monitoring and management.

We will further note that Sonoma Baylands, as now proposed by the Coastal Conservancy, including their commitment to restoration of about 200 acres of the northern parcel to seasonal wetlands, as well as the restoration of about 300 acres of the southern parcel to tidal wetlands is a portion of this project that we support without any major qualification. We all hope the restoration will be successful.

The Health Risk assessment on the Galbraith Golf Course was not received in time for our experts to give it necessary study. In the absence of the extension of time which we requested in a letter to Lt. Col. Cardoza on 9 April 1994, we reserve the privilege to make substantive comments on this HRA in the next two weeks.

1.0 NEED FOR AND OBJECTIVES OF ACTION

1-1/26 Figure 1.2-1 lacks labels for the Middle Harbor and Bar Channel areas described on lines 27-29.

1-3/35-7 Insofar as the DSEIR/EIS does not evaluate -- as distinguished from summarize -- the findings of the Long Term Management Strategy (LTMS) group, readers of this document will not know what additional alternatives were considered, why they were rejected, or whether reasonable people might disagree with the choice of eight disposal site options contained in this document. Inspection of the LTMS discussions in Section 1.5 (Prior Studies, Reports, and Existing Projects) and Chapter 10 (Cumulative Impacts) is unrewarding with respect to whether the eight sites are the only reasonable alternative sites. Please explain why no Class II landfills were included among the eight candidate disposal sites.

1-3/40 "The selection of alternative disposal sites will be based on environmental and economic factors." Please explain the combination of factors -- environmental, economic *or other* -- which eliminated a Class II upland landfill, Keller Canyon (Pittsburg),

- 6 | and two Class III landfills, Vasco Road and Altamont (both near Livermore), from consideration along with Redwood landfill (Class III).
- 7 | 1-5/42 What are "*Phase I* [emphasis added] dredged sediments"?
- 8 | 1-5/43 Why did the Port consider the sediments to be inert waste, rather than designated waste, on its face a reasonable categorization by the Central Valley Regional Water Quality Control Board? It should be spelled out that designated wastes can only go in a Class II landfill, such as Keller Canyon, (Pittsburg), in the near future, Vasco Road or Altamont (both near Livermore). Classification by the San Francisco Bay Regional Water Quality Control Board of dredge spoils as designated wastes would rule out use of Galbraith Golf Course, a former Class III landfill which will have to be permitted for use as a depository of dredge spoils by the Local Enforcement Agency for Alameda County, and by the California Integrated Waste Management Board.
- 9 | 1-8/7 Please indicate what the LTMS regional plan objective of disposal of 400 mcy of dredged material from the SF Bay Area consists of, since it does not appear to be included in Chapter 10 (Cumulative Impacts).
- 10 | 1-8/9 Insofar as dredged material may be deposited in a Class II or perhaps even a Class III landfill, it would appear that the California Integrated Waste Management Board and its Local Enforcement Agency for provisions of the California Integrated Waste Management Act of 1989, the Alameda County Health Care Services Agency, Environmental Health Division, should have been included in the LTMS. Please indicate whether this was considered, and what was the decisional basis for non-inclusion of a solid waste disposal agency.
- 11 | 1-8/33 Did the Technical Review Panel evaluate the technical and economic feasibility of upland canyon landfilling, and of the handling alternatives to barge/slurry operations which appear to be best suited to the 15 highly feasible sites described in Chapter 10 (10-3/1 *et seq*)?
- 12 | 1-8/43 Other Existing Projects should be summarized in this chapter, rather than merely referring the reader to the narrow concerns of the Cumulative Impacts discussion.
- 13 | 1-8/5 Public comments have already been provided regarding perfectly "reasonable" alternatives to Galbraith, Leonard, *et al*, yet they have apparently already been ruled out by the Long-Term Management Strategy apparatus. Please include a discussion of the openness of the lead agencies' personnel to consideration of upland canyon Class II landfill alternatives.

2.0 PROPOSED ACTION AND ALTERNATIVES

- 14 | 2-1/31-35 Deepening and widening is the key action which, depending on the manner of accomplishment, could afford an alternative to deposition of 1.3 mcy on GGC.
- 15 | 2-3/5-6 To say that "Ultimately, the choice of dredge will depend on cost-effectiveness" is to evade disclosure of the full costs, impacts and benefits of significant alternatives until after the die has been irreversibly cast for the COE/Port preferred alternative, disposal at GGC. While cost certainly must be weighed, it has not been identified in the DSEIR/EIS as an overriding consideration which would justify choosing other than the environmentally superior alternative. Please clarify the intention of the quoted statement.
- 16 | 2-3/13-15 The DSEIR/EIS should incorporate a full economic and technical analysis of at least one alternative location for drying out dredge spoils, based on the high percentage (67 - 83%) of solids resulting from clamshell dredging:
- "For clamshelled [*sic*] filled barges, the 3,000-cy scows could hold approximately 2,000-2,500 cy of actual sediment; the rest of the scow's capacity would be taken up by the water that is picked up in the dredge."

The Sierra Club proposes that the COE and Port fully analyse the technical and economic aspects of three to nine alternatives not now included in the DSEIR/EIS: 17

B5 *et seq* Clamshell excavation, transport of sediments suitable for upland disposal either by truck, or by barge to a point of truck trans-shipment, or some other, more cost-effective technique to one of three suitable landfills:

- a. Keller Canyon (Pittsburg)
- b. Vasco Road (Livermore)
- c. Altamont (Livermore).

Alternative locations for drying the dredge spoils could be:

- a. Concord Naval Weapons Station
- b. Alameda County Waste Management Authority parcels (1187 acres), N. Flynn Road, Livermore
- c. Mare Island Naval Shipyard

2-14/5-25 The gist of this discussion occurs at lines 23-25:

"All sediments from Oakland Harbor are suitable for upland disposal with appropriate management and control of contaminant migration on a site-specific basis.

It is our understanding that Bay Area landfills require wastes to be at least 50% solids for acceptance. Thus, deposition of the 1.3 mcy of materials intended for GGC is environmentally acceptable at any permitted Bay Area landfill with adequate capacity, including Keller Canyon (Class II), Vasco Road or Altamont (both Class III) landfills. 18

9.0 GROWTH-INDUCING IMPACTS

9-1/1 Is a secondary purpose or consequence of the project the preparation of the Galbraith Golf Course area for future expansion of Oakland Airport operations under the Port of Oakland's 2002 Airport Development Program, including the addition of 2800 parking stalls? (Milan Kovacevic, "Can Oakland Avoid Conflicts," *Yodeler*, San Francisco Bay Chapter, Sierra Club, April 1994, pages 4-5, enclosed). If so, this section should be revised to discuss the growth-inducing impacts of projected Oakland Airport expansion. 19

10.0 CUMULATIVE IMPACTS

10-1/36-7 "Upland sites are currently being used for limited volumes for project-specific purposes. No large capacity upland disposal sites are currently permitted for regional use." Please explain why upland Class II (designated waste) landfills are not permitted for deposition of dredge spoils, in light of the evident *currently* permitted large capacities at three Eastbay Class II facilities, Keller (50 mcy), Vasco (16.1 mcy), and Altamont (27.8 mcy, possibly including landfill cover). 20

10-1/39-44 Will the LTMS evaluate upland Class II landfills as deposits for dredge spoils? 21

10-1/45 When will the LTMS complete environmental review of policy alternatives? (Correct spelling of source's name is Tuden.) 22
23

10-3/1-6 What were the initial screening criteria (technical, environmental, economic, or other) which eliminated upland Class II landfills from the list of 12 sites deemed "highly feasible"? Please indicate the complete screening and comparison to the highly feasible list for these and any other permitted Class III and Class II landfills, and the remainder of the 80 candidate land disposal sites. Were any of these landfills ranked as to feasibility? Were any of them considered as feasible locations for drying dredge spoils? Were any of them evaluated for nearby potential drying sites (100 acres, rural, buffered from residential or commercial areas)? 24

- 25 | 10-3/9 Disposal Option/Confined Disposal 9 to 54 mcy estimated capacity. It is evident from inspection of Table 10.1-2 (page 10-4) that this range is from three of the 12 highly feasible sites. Is it a correct assumption that Class II and III landfills would be feasible Confined Disposal sites? If so, please indicate the additional confined disposal capacity gained by inclusion of such sites.
- 26 | 10-11/30-35 Has Port of Oakland staff or Commission contemplated Airport Ground Transportation Projects which could affect the future lands uses on the proposed Galbraith disposal site, after the dredged materials have been dried and employed in reconfiguring the present golf course? Are any reductions in the size of recreational open space to make way for transportation infrastructure, including provision of 2800 additional parking stalls, contemplated? If so, please specify details of any such policy and planning events.

11.0 SHORT TERM USE vs. LONG-TERM PRODUCTIVITY

- 27 | 11-1/16-36 This discussion needs a summation; it would appear that the short-term impacts to the environment, specifically to wetlands and water quality, are insignificant.
- 28 | 11-1/36-7 "Use of the Galbraith site for sediment disposal would preclude use of the existing golf course on this site for up to 7 years." Is this considered a significant or insignificant short-term impact to recreational open space? Please expand the evaluation.

13.0 PUBLIC INVOLVEMENT AND INTERAGENCY COORDINATION

- 29 | 13-1/2 Please list all recipients (including mailing addresses) of the state Notice of Preparation issued June 25, 1991 by the preparer, which we presume to be the state lead agency, the Port of Oakland.
- 30 | 13-1/21-29 Regarding the alternative of landfill disposal for Ninth Avenue Terminal materials at West Contra Costa, Vasco, or East Contra Costa, please explain why these alternative sites were not considered for the 1.3 mcy the Port intends to landfill at Galbraith after drying.
- 31 | 13-1/45 Please describe in depth "The breadth of the alternatives evaluated in depth, and why certain alternatives were eliminated from further consideration in the environmental review process."

15.0 PERSONS AND AGENCIES CONTACTED

- 32 | 15-2/9 "Ann Rand," who is definitely not the late novelist-philosopher-celebrator of selfishness, spells her names Anu Raud.
- 33 | 15-2/26 "Tuten" should be Tuden.

APPENDICES

- 34 | Appendix A There is no explanation of sediment testing methods. Were cores done in shallow layers, or was there an 8 foot core taken at a site with the 7feet of clean mud and sand mixed with the one foot of contaminated material? Please gove a detailed description of the actual sampling methods.
- 35 | Appendix B There were no Air Emmisions values given to the Port/Landfill option. Since it is our understanding that the material will be hauled by truck or train to some distant landfill, you must disclose expected air emmisions.

Respectfully,


DAVID NESMITH
Conservation Director


DAVID TAM
Solid Waste Chair

CAN OAKLAND AVOID CONFLICTS?

Oakland Airport plans to expand (see "Oakland's Plans"). And environmentalists have a complex reaction.

After all, the Metropolitan Transportation Commission's (MTC) Regional Airport System Plan Update calls for shifting a greater proportion of air traffic from San Francisco Airport to Oakland and San Jose Airports, which tends to decrease traffic and air pollution by making desired flights closer to home.

And, Oakland's plan will include some sort of mitigation for 26 wetland acres filled by the Port in 1988. (The nature of this mitigation, however, won't be known till the EIR/EIS for the plan.)

But there are also concerns. The 1988 filling was stopped only by a lawsuit brought by Sierra Club together with

Golden Gate Audubon and Save San Francisco Bay Association.

Concerned that annual cargo flights are expected to double from 13,000 to 26,000 by 2002, Barbara Tuleja, president of CLASS (Citizens' League for Airport Safety and Serenity), a group of concerned residents who monitor Oakland Airport expansion, thinks "that one should look for a better-placed solution to more cargo."

Can the proposed expansion be accomplished without unacceptable wetlands destruction, noise, and traffic?

Wetlands in the Current Proposal

Loretta Meyer, Environmental Assessment Supervisor at the Port of Oakland, points out that the 2002 Airport Development Program will not involve any filling of the Bay. "There won't be major impacts to wetlands," she further notes, "though there may be no way to avoid some impact on some wetlands." Those potential impacts will be mitigated on site, she says.

"It's a mixed bag," says Arthur Feinstein, Program Coordinator of Golden Gate Audubon. "In terms of this ten-year plan, the Port... has tried to be conscientious towards wetlands.... On the other hand... it's still an expansion project that may lead to serious conflicts in the future over wetlands and Bay filling."

"They are planning to expand the existing runway," Feinstein continues, "and there's a least tern colony at the end of that runway.... It's an endangered bird and there's only one successful colony in the Bay Area right now.... Until we see the [EIR/EIS], we're not going to be able to say what the impacts will be on the least tern."

"The runway extension project is being scoped," Meyer answers, "to avoid potential impacts to wetlands as well as to endangered species, [including] the least tern habitat."

Wetlands in the Long Run

"Even if this project now is a relatively benign one in terms of wetlands," Feinstein says, "it's setting us up for a greater conflict 10 years down the road because it's providing the infrastructure for [the

continued on following page

CAN OAKLAND AVOID CONFLICTS?

continued from preceding page

Airport] to greatly increase their ridership by increasing their stationary facilities.

"If that happens, there will be increased pressure to expand the runway facilities and that's when the really significant conflicts will develop. One shouldn't feel too complacent about this proposal because it's on a very short time line."

Jennifer Ruffolo, Assistant Executive Director for Government Affairs at the Bay Conservation and Development Commission, echoes Feinstein's concerns saying, "In [Oakland's] longer range planning, out beyond their 2002 Plan, there's definitely a possibility of an additional runway."

MTC suggests that "the need for development of a second parallel air carrier runway [be reassessed] when the airport reaches 10.6 million annual passengers."

"That's where we would have concerns," Ruffolo says, "because the runway would have to go into the Bay."

Traffic and Noise

Tuleja points out that increased cargo traffic will burden already overloaded highways.

She also points out that cargo planes take off at night. Many night flights of Federal Express are the very loud (older) Stage 2 aircraft. In addition, the cargo support fleet, the smaller planes that shuttle cargo between smaller cities and the major airports, are low-flying, numerous, noisy, and polluting.

"Increasing cargo increases pollution, increases noise, and eventually...

puts runways over wetlands," Tuleja says.

Steven Grossman, however, Port of Oakland Director of Aviation, points out that at night planes are routed preferentially onto runways with least noise impacts on neighboring communities. "Federal Express," Grossman adds, "will comply with the federal requirement to have [all] Stage 2 aircraft phased out by the year 2000."

There are no easy answers. Environmentally aware neighbors of San Francisco, Oakland, and San Jose airports each want to limit growth at their airports. Though rerouting traffic from one airport to another may improve short-term imbalances, it can not solve long-term environmental problems associated with continued airport expansion. Long-term solutions demand coordinated regional planning and action.

Milan Kovacevic



OAKLAND'S PLANS

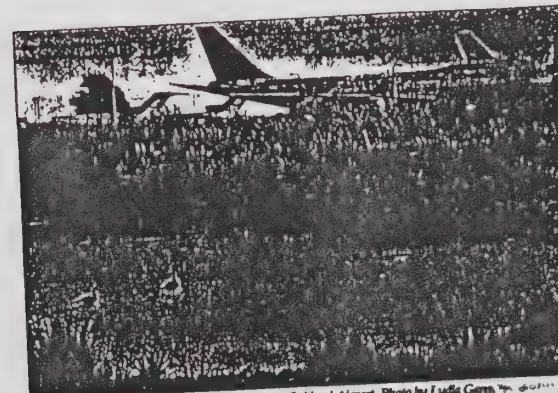
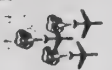
The Port of Oakland's 2002 Project Description predicts that annual passengers at Oakland Airport will increase 54% from 6.5 million in 1992 to 10 million in 2002, and air cargo 264% from 720 million pounds to 1.9 billion pounds. And so the 10-year 2002 Airport Development Program includes:

- adding about 305,000 square feet to the passenger terminals,

- including up to 12 new aircraft/passenger gates;
- upgrading roadways;
- expanding air cargo facilities, including adding up to 260,000 square feet to the Federal Express regional hub;
- extending the primary commercial aviation runway from 10,000 to a maximum of 12,600 feet;
- adding about 2800 parking stalls.

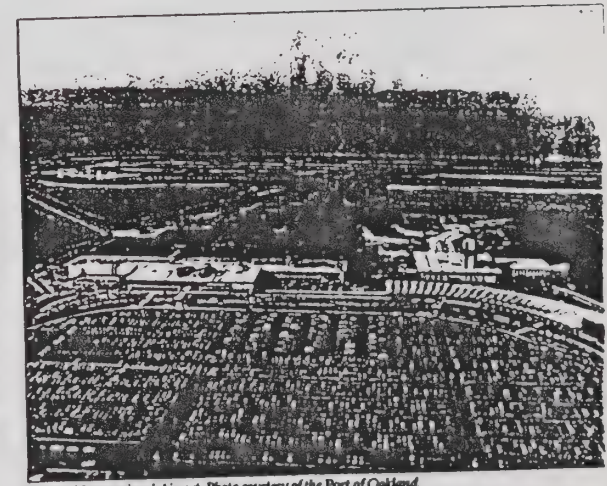
A Draft Environmental Impact Report/Environmental Impact Statement (EIR/EIS), focusing on the first five years of the Plan, is due (a bit behind schedule) this July. A later runway extension will be evaluated in detail in a supplemental EIR/EIS.

The Airport predicts that the expanded air cargo facilities will generate 2,400 jobs.



Big birds and wetlands birds live close together at Oakland Airport. Photo by Lydia Gerns.

Sierra Club Yodeler April 1994



Oakland International Airport. Photo courtesy of the Port of Oakland.



Natural Heritage Institute

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Non-Profit Law and Consulting in Conservation of Natural Resources and the Global Environment

Gregory A. Thomas
President

March 28, 1994

Alan Ota
Ocean Disposal Coordinator
U.S. EPA
Region IX (W-7-3)
75 Hawthorne Street
San Francisco, CA 94105

RE: San Francisco Deep Ocean Disposal Site; Proposed Rule

Dear Alan:

These comments are submitted on behalf of the Natural Heritage Institute ("NHI") and our clients, the Pacific Coast Federation of Fishermen's Associations ("PCFFA") and their member organizations with regard to the proposed rule designating an Ocean Dredged Material Disposal Site ("ODMDS"). We appreciate the opportunity to participate in the ocean dump site designation process.

As you are aware, I wrote to EPA on February 25, 1994 protesting the brief amount of time available to respond to the proposed rule given the unavailability of the Federal Register notice in the first two weeks of the comment period. Brian Ross, EPA's Dredging Projects Coordinator telephoned me on March 1 to inform me that the agency would be accepting comments on the proposed rule referenced above for several weeks following the technical deadline on March 18. A copy of my letter is attached hereto for your reference, and for incorporation into the record.

Need for Disposal Site Designation

EPA appears to have violated the Marine Protection, Resources and Sanctuary Act ("MPRSA" or "Ocean Dumping Act") which mandates that the agency establish the need for the particular ocean site designation. EPA has failed to demonstrate either that there is: (1) an actual need to dredge 400 million cubic yards ("mcy") of sediment out of the Bay, or (2) that over 80% of this sediment must be dumped into the ocean. EPA has abandoned that responsibility, choosing instead to rely on outdated, unverified and undocumented

estimates from another agency, the U.S. Army Corps of Engineers ("COE").

We have on several occasions established the flawed nature of the 400 million cubic yard estimate. (See, e.g., Cynthia Koehler Letter to Harry Seraydarian re Draft EIS, Jan. 22 1993.) To date, EPA's response has been limited to the assertion that the COE's estimate is the "best existing information." (See Final EIS at A-154, Response 21-A.) EPA has never attempted to respond to our claim that there is no evidence in the record supporting a purported "need" to dump 80% of this material in the ocean. (See Final EIS at A-69; A-154, Response 21-B.) Note that 6 mcy of dredged material is roughly the equivalent of an entire Oakland Harbor Deepening project every year. To our knowledge, no one has submitted data indicating that this level of ocean dumping is necessary.

EPA's interpretation of its duty to establish a need for ocean dumping threatens to render this requirement meaningless. EPA maintains, in essence, that regardless of age, lack of basis, or unreliability of available data, such information will suffice to justify the designation of an ocean dump site of any capacity simply because it is the only information at hand.

EPA has carried this flawed position into the proposed rule, maintaining without any evidence or support that there is a need to dredge 400 million cubic yards of material out of the Bay. (See Proposed Rule at 13.) Its proposal to "limit" ocean dumping to 6 million cubic yards annually is not comforting, since this figure represents fully 80% of all material proposed to be dredged annually, or 100% of material "suitable" for aquatic disposal.

Given the COE's lack of empirical basis for its dredged sediment disposal requirement, and EPA's failure to consider the availability of alternatives to ocean dumping for "suitable" dredged sediment (see below), it appears that the agencies have failed to establish a "need" to dispose of 6 mcy of dredged sediments in the ocean as required by statute. To the contrary, it appears likely that the need for ocean disposal is far more limited.

We once again respectfully request that prior to final designation of an ocean disposal site, that EPA provide the public with an empirically sound justification for the "need" to dispose of 6 million cubic yards of sediment in the ocean every year. To the extent that EPA is unable to produce such an estimate, we respectfully recommend that the site be limited to a total volume that reflects: (1) the actual amount of "suitable" sediment dredged out of the Bay over the last ten years; and (2) the estimated volume of dredged material capable of being beneficially reused according to reports prepared under the auspices of the LTMS Upland Work Group. We incorporate by reference the entire critique

of the COE volume estimate from our January 22, 1993 letter cited above. (See Final EIS at A-68 - A-69)

Alternatives Analysis

As we have protested to EPA on numerous occasions, the final EIS failed to consider a range of alternatives to ocean dumping of dredged material. (See, e.g., Final EIS at A-70.) Indeed, EPA failed to consider any alternatives to ocean dumping, arguing that it is excused from this task by the programmatic review now being undertaken in the LTMS process. (See Proposed Rule at 14.)

Such subsequent review clearly violates the National Environmental Policy Act ("NEPA") which requires that agencies consider alternatives prior to undertaking agency action. The programmatic EIS is not expected to be released in final form until mid-1996, well after EPA's final action designating the ocean disposal site which is the subject of the proposed rule. Whatever conclusions that programmatic review reaches regarding the availability of alternatives to ocean dumping, they will have gone unheeded for a minimum of two years. Moreover, the ocean dump site already will have been designated, rendering extremely difficult any possibility of limiting the volumes allowed to be dumped into the ocean below 6 million cubic yards.

This is not a matter of mere procedure. The LTMS "Policy-Programmatic" EIS/EIR will serve as the basis for a final Management Plan for Bay Area Dredging, which is expected to be the blueprint for dredged material disposal well into the next century. While there is little question that ocean dumping will be included in this final blueprint, it is wholly unacceptable for the agencies to determine the role of ocean dumping in this plan prior to any comprehensive environmental review of alternatives. In this regard, I attach my letter to COE Brigadier General Hunter of February 1994 regarding the EIS/EIR and Management Plan.

The failure to consider alternatives, in combination with the failure to establish a need to dump such high volumes into the ocean, is of concern for two additional reasons. First, as indicated below, the proposed dump site is extremely unusual and carries with it severe risks for the ocean environment. Second, to the extent that an ocean dump site is permitted to handle large volumes of dredged material, the stimulus for the agencies and the dredgers to develop alternatives to open water dumping is significantly reduced. By establishing a huge site prior to the consideration and development of alternatives, EPA has seriously skewed dredged material disposal policy in favor of ocean dumping.

For the reasons set forth above, we respectfully recommend that the proposed rule be revised to state that it is an interim rule, that will be reopened for consideration once the Final LTMS Policy-Programmatic EIS/EIR and the final Management Plan for Bay

Area Dredging are released to the public. In our view, failure to so characterize the ODMDS rule constitutes a clear NEPA violation.

Unique Nature of the Proposed ODMDS

The proposed ODMDS is fundamentally different from other ocean dump sites in several important respects. At 50 miles from the Golden Gate, it would be the furthest dredged material dump site from shore by a significant margin. In addition, it would be the deepest dredged material dump site ever designated in the U.S.

EPA and the U.S. Coast Guard have no experience with dredged material disposal sites located 50 miles from shore. According to our brief review, the vast majority of dredged material ocean dump sites designated within the last decade are no more than 6 miles from shore, and most of them are closer even than that. Less than five sites are more than 8 miles from shore, and it appears that the dredged material site farthest from shore prior to the proposed ODMDS, is not even 20 miles out. Moreover, no site in California, or even the west coast, is further than 6.2 miles from shore. Therefore, the challenge of protecting the marine environment from the problems associated with moving dredged sediments long distances through sensitive habitat will be somewhat novel for the regional agencies.

Moreover, in the last decade, the vast majority of ocean dump sites nationwide were located in less than 100 feet of water. Only 5 sites were located in depths over 1000 feet. The west coast has no experience with deep water dredged sediment disposal. Yet at 9,800 feet, the proposed ODMDS would surpass the deepest site ever designated for dredged materials previously by over 200%.

While we believe that EPA was correct to propose designation of a dredged material dump site off of the Outer Continental Shelf, such designation also carries significant risks of short dumping (inadvertent and otherwise) and other problems inherent in transporting large amounts of sediment through sensitive fisheries habitat out to a distant site. These risks are magnified by the absence of data regarding sediment dispersion and migration at such depths.

For this reason, we have long urged EPA to adopt a management and monitoring program that recognizes the unusual character of the proposed site, and minimizes the risk to the marine environment of the proposed dumping. We are not satisfied that the plan outlined in the proposed rule either acknowledges these issues, or accounts for the risks to the environment implicit in the proposed ODMDS.

Site Management and Monitoring Plan

EPA has received numerous comments from fishing groups, as well as other ocean and coastal conservation organizations, with

regard to early drafts of the Site Management and Monitoring Plan ("SMMP") for the proposed ocean dump site. These comments have consistently centered on several themes.

First, the SMMP must contain transport, handling and disposal requirements that apply to all permits. Second, the SMMP must contain a meaningful program for monitoring the impacts of the ocean dumping on marine resources, including methods for tracking the dispersal and migration of dumped sediments. Third, the SMMP must contain a meaningful program for monitoring compliance with the SMMP itself and other applicable permit requirements. Fourth, ocean dumping must be tied to a clear and unequivocal commitment to the operation of impacts and compliance monitoring programs. Finally, the monitoring programs, and the SMMP itself, must be enforceable not only by EPA, but by members of the public with standing to represent the marine resources at risk. These requirements are not satisfied by the proposed rule. Our concerns in this regard are detailed further below.

Need for Strict Limits on Transport and Handling/Monitoring for Compliance with Such Limits

The proposed rule does not restrict dredged sediment transport in terms of timing or handling. There are no equipment restrictions. The rule makes entirely discretionary the restriction of disposal operations even when the material "is shown to form significant surface plumes." (Proposed Rule at 31)

Moreover, the rule fails to provide for, or otherwise require, any type of meaningful monitoring of the few restrictions and requirements which are proposed. EPA simply states that "surveillance" is not its own responsibility, and that "as staff and equipment availability permit" EPA and the COE "may" at their complete discretion, provide on-board observers or "impose other requirements to confirm that disposal occurs within the central dumping zone." (Proposed Rule at 32.)

This is a non-enforcement plan which is wholly unacceptable. As the agency will recall, the brief ocean dumping which occurred off of Half Moon Bay six years ago resulted in miles-long plumes of dredged sediment in the ocean far from the designated dump area. And this was a site located far closer to shore, where surveillance was a relatively simple matter. It is not sufficient for the agency to designate a deep water site, and then abandon its statutory responsibility to ensure the safety of the marine resources it has put at risk by so doing.

We respectfully request that EPA revise the proposed rule to provide for SMMP requirements that apply to all ODMS permits which minimize the risk that dredged sediments will be discharged into the marine environment prior to reaching the designated site. While we recognize that each dumping permit may contain different

conditions and restrictions relevant to the particular dredging project at issue, it is not reasonable for the agency to exclude from the proposed rule guidance or restrictions that should apply generally to all disposal operations. This lack of guidance effectively forces members of the public to become intimately involved with each and every permit issued for ocean dumping, and engage in repeated conflicts over what should be basic protections for the ocean environment applicable to all permittees.

Similarly, we request that EPA revise the proposed rule to provide for meaningful monitoring of permit and SMMP compliance. We appreciate that it may not be feasible, or necessary, to have on-board observers on every barge. Nevertheless, there is a great deal of middle ground between monitoring every barge, and providing no assurance of any monitoring on any dumping barges as the agency has proposed in its draft rule. For example, we believe it is entirely feasible for the rule to require that dredgers allow a team of independent scientifically and legally appropriate observers to accompany them on a random basis in order to monitor operations.

It is not reasonable for EPA to make all dredged material compliance monitoring contingent on "staff and equipment availability." To the contrary, it is the proposed ocean dumping which should be contingent on the availability of compliance monitoring. (See below.) We request that the rule be revised accordingly.

Impacts Monitoring

As EPA recognizes, the agency must monitor the impacts of the dredged material dumping which occurs at the ODMDS on marine life in and around the site. Although EPA has attempted to address this issue with a tiered monitoring plan, the plan as set forth in the proposed rule is seriously deficient in several respects. These are addressed briefly below.

Lack of Baseline Data

EPA has failed to develop meaningful baseline data regarding the aquatic resources at issue. The studies conducted for the EIS provided only superficial characterizations of sites for purposes of comparison. The data reflects only limited seasonality regarding the diversity and densities of resources. Moreover, the surveys from which the resource data was gathered were not performed for the purpose of developing baseline data, and were not conducted with scientific rigor. This data therefore does not adequately characterize current conditions and cannot form the basis for determining causal relationships between dredged material dumping and resource impacts.

This is critical, because without such data, it is not

possible to correctly measure changed conditions or accurately determine the significance of changes which are detected. Yet, this concept of changed circumstances is the heart of the proposed tiered monitoring plan. In other words, EPA's limited baseline data about the resources at stake fundamentally impedes the ability of any impact monitoring plan to detect and/or prove that impacts may be occurring.

We recommend that EPA conduct a very rigorous monitoring program during the first year of dumping in order to develop a more scientifically sound baseline characterization of the site and environs. Without such meaningful data, the entire SMMP will provide little or no protection for the marine environment.

Vague Trigger Levels Between Tiers

The proposed rule indicates that the SMMP will monitor impacts of dredged material dumping at increasing levels of intensity depending upon perceived impacts. However, it is very difficult to discern the triggers that the agency has proposed to determine when moving to the next tier is appropriate.

For example, Tier 1 monitoring would involve a set of tests to determine the whether contaminants are accumulating in sediments. (See below.) However, the rule fails to indicate what the "contaminant trigger levels" would be that would require the next level of monitoring or management action. Nor does the rule indicate whether EPA plans to establish firm trigger levels requiring a cessation of dumping.

Tier 1 biological monitoring similarly contains no cognizable trigger for moving to Tier 2 or imposing "management actions." The proposed rule indicates only that if "statistically negative trends are detected" or if "periodic observations" (see below) indicate that "adverse impacts are occurring" EPA would move to the next level. (Proposed Rule at 28) These phrases are so vague as to be open to almost unlimited interpretation, and thus are not useful as "triggers."

As between Tiers 2 and 3, it is impossible to discern what impacts or levels of impacts will trigger either management actions or movement to the next Tier. The proposed rule makes no attempt to clarify what constitutes an "elevated concentration of sediment" or "sufficient information" to make a management decision.

We maintain that this level of ambiguity is unacceptable. EPA must provide clear, measurable triggers for moving between tiers. Moreover, EPA should state when moving to the next level of monitoring is appropriate as opposed to taking action to restrict disposal. While a certain level of discretion and flexibility is certainly necessary, it is not appropriate for the agency to rely on standards so vague that they do not provide any policy guidance

or protection for marine species. Moreover, these triggers should be scientifically, rather than policy, based. We recommend that EPA work with the Ocean Studies Work Group in developing the triggers.

Inappropriate Impacts Tests

The impacts monitoring plan proposed in the draft rule contains several tests for detecting "adverse impacts" which would not necessarily satisfy this goal. For example, the proposed rule states that unless a thickness of 5 centimeters of dredged material (or more) is found to be outside of the boundary of the disposal site, EPA will take this as proof that the dredged sediment is not migrating in a harmful manner, and on that basis will do no further monitoring or investigation. (Proposed Rule at 27.)

In fact, however, a low thickness outside of the boundary site could mean that the dredged sediments are travelling more widely, and are not staying in place. EPA needs to test for dredged materials some distance from the designated site as part of its Tier 1 monitoring.

Flawed Biological Monitoring Methods Proposed

With regard to biological monitoring to determine impacts to birds, fish and marine mammals, EPA proposes only "periodic shipboard observations" by the permit-holder. This is not an acceptable method of monitoring for impacts to these resources because: (1) the commitment to "periodic" observations is vague; (2) the reliance on the permit holders to monitor the impacts of their own activities constitutes a clear conflict of interest; and (3) as discussed above, the time-series data is not scientifically rigorous. Combined with EPA's failure to develop meaningful baseline data for fish, mammals and birds, EPA's monitoring proposal for these species effectively affords them no protection from adverse impacts associated with dredged material dumping.

Flawed Approach to Chemistry Testing

The draft rule proposes to analyze sediment samples to measure long-term accumulation of contaminants. (Proposed Rule at 28.) However, this approach ignores the fact that such accumulation occurs over time. Therefore, it is essential that the agency develop methods to test for bio-accumulation in order to detect potential contamination issues prior to their becoming a significant problem. Looking only at sediment chemistry is too limited an approach to the critical issue of contamination. EPA should also take samples from the water column, measure particle distribution and light penetration from layers above and below the thermocline.

Moreover, the proposed rule appears to limit testing for bio-

accumulation to the third tier. By this time, it will obviously be too late. Moreover, because of the lack of baseline data (as discussed above) it will be extremely difficult for EPA to determine whether the dredge dumping is the source of any bio-accumulation in benthic species or not. We strongly recommend that EPA conduct a baseline of body burdens prior to any permitted disposal in order to develop baseline data which the agency will then be able to use later in order to determine whether or not conditions have changed.

The proposed chemistry monitoring continues an emphasis on benthic resources to the exclusion of other impacted resources. EPA is obligated to monitor for actual and potential impacts to all marine life including fish, crustaceans, birds and marine mammals. Very little in the proposed monitoring plan appears to be geared toward protecting these resources. Tier 2 physical monitoring exacerbates this trend by focusing exclusively on benthic resources. EPA should be concerned as well about the effect of sediment transport and dispersion on pelagic species.

Significance Criteria

The draft rule lists 5 criteria for determining when site use can be modified or terminated by EPA in order to reduce impacts. (Proposed Rule at 33-34.) There are several problems with this formulation.

First, the five criteria, like the triggers in the impacts monitoring plan, are vague to the point of having little meaning. The draft rule offers no guidance as to what would constitute "significant adverse bioaccumulation in organisms" or "significant adverse changes in the structure of the benthic community." Again, we recognize the need for flexibility in the agency's management of the site. Nevertheless, there is a great deal of middle ground between rigid standards and no standards at all. We are confident that EPA will be able to strike a practical solution that does not compromise the health of the marine environment.

Second, the criteria appear to set higher standards for taking "management action" to protect resources than contemplated by even the very vague guidelines in the impacts monitoring plan. It does not appear to be appropriate to limit EPA's ability to take action to restrict ocean dumping in order to protect marine resources to situations where "significant adverse impacts" have already occurred. To the contrary, EPA is fully empowered to take such action in order to prevent potential impacts from occurring. We respectfully recommend that this section of the rule be revised to reflect EPA's duty and authority to prevent harm to marine resources before it occurs.

Dredged Material Disposal Restrictions

The draft rule states that "disposal operations will be prohibited if resources for implementing the [SMMP] are not available." (Proposed Rule at 1.) This statement is later modified to explain that disposal operations will not be allowed "if funds to implement the necessary monitoring are not available." (Id. at 33.) While we appreciate EPA's attempt to accommodate our concerns regarding the establishment of a monitoring program, these statements are somewhat ambiguous and incomplete.

As indicated above, monitoring dredgers for compliance with the SMMP and permit requirements is as important as monitoring for environmental impacts. The rule should be revised to reflect that both types of monitoring programs are absolute conditions on ocean dumping of dredged material.

Moreover, the rule should be clarified to reflect that the mere availability of funding for these monitoring programs is not sufficient; the programs must be fully implemented during the entire life of any ocean dumping permit. This concept is not clearly communicated by the draft rule.

Inclusion of the SMMP in the Site Designation Rule

While the proposed rule discusses the SMMP at some length, we reiterate our position that the entire SMMP is properly part of the regulation designating the site. Although we and others have written to EPA on this subject, we have never received a written response from the agency in this regard. It is our understanding that EPA has resisted this recommendation in order to maintain a level of operational flexibility in managing the site.

As indicated above, we concur fully with EPA that it should retain a level of discretion in its management of the proposed site. We cannot agree, however, that the rule cannot be structured to provide for such flexibility. Innumerable regulations which have gone through notice and comment confer tremendous discretion upon the agency. They also, however, establish enforceable duties and obligations on both the agency and permittees as appropriate.

As indicated throughout this comment, we believe that management of the proposed site is best achieved through a blend discretionary actions tempered by some clear, enforceable requirements and duties. Establishing such a structure is uniquely the province of regulations. Mere policy guidance, however, is non-enforceable to the extent that it does not have the force of law in the same respect as a promulgated regulation. The requirement that the agency promulgate regulations designating ocean dump sites indicates that the agency must include statutorily mandated site management in the rule as well.

Compliance with Regulatory Requirements

We do not agree with EPA's determination that the regulatory requirements of the MPRSA are fully satisfied by the proposed ocean dump site. These concerns were set forth in our comments on the Draft EIS, and were not adequately addressed in the final EIS. (See Final EIS at A-73 - A-74.)

Responses to Comments

The proposed rule purports to respond to comments received on the Final EIR for the ocean disposal site, but fails to respond to any of the comments received by the agency on the various drafts of the SMMP. Nor does it respond to detailed comments provided to the agency by a coalition of fishing and coastal advocacy groups expressing concerns with the agency's entire approach to site management and monitoring. A copy of that coalition letter is attached hereto for your reference and for incorporation into the administrative record.

Nor does the proposed rule respond to the oral comments made during a lengthy meeting with you, COE Col. Leonard Cardoza and other EPA and Corps staff on this subject last summer. Given the considerable energy and resources devoted to this matter by these organizations, we urge you to acknowledge and address their concerns.

Discussion of "Site 2"

The proposed rule states that Site 2 was eliminated from consideration as the ODMDS for the sole reason that it is included within the Monterey Bay National Marine Sanctuary which precludes the designation of new dump sites for dredged material. (Proposed Rule at 15-16.) However, the proposed rule also indicates that Site 2 was the subject of significant study. We recommend in issuing the final Rule, that EPA reveal that Site 2 contained high commercial fish and fish habitat values which most likely would have precluded designation of this site as the ODMDS.

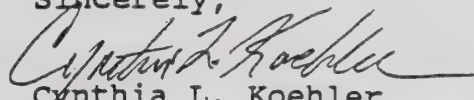
Conclusion

As indicated in our comments on the ODMDS Draft EIS, we agree with EPA that, of the sites considered, Site 5 is probably the least harmful from an environmental perspective. However, we have long conditioned our willingness to accept any ocean site on the express understanding that full protections for the marine environment will be imposed on any dumping, that compliance with all restrictions will be strictly monitored, and that EPA will shoulder the responsibility for monitoring the short- and long-term impacts of dumping on the ocean environment. To the extent that the proposed rule fails to meet these basic requirements as outlined herein, we cannot support the site as proposed for

designation in the draft rule.

Please feel free to call me if you have any questions.

Sincerely,



Cynthia L. Koehler

cc: Zeke Grader
Pietro Parravano
Bay Area Congressional Delegation



SIERRA CLUB SAN FRANCISCO BAY CHAPTER

5237 COLLEGE AVENUE • OAKLAND, CALIFORNIA 94618-1414

TELEPHONE: 510-653-6127

ALAMEDA COUNTY • CONTRA COSTA • MARIN • SAN FRANCISCO

January 25, 1993

United States Environmental Protection Agency
75 Hawthorne Street
San Francisco, California 94105

ATTENTION: Mr. Harry Seraydarian, Director

RE: DRAFT Environmental Impact Statement (EIS) for San Francisco
Bay Deep Water Dredged Material Disposal Site Designation

Dear Mr. Seraydarian:

The Sierra Club appreciates the opportunity to present comments to the above referenced draft. We intend to cooperate with and work toward developing a beneficial solution to the continuing issue of how to utilize dredge material.

Our comments are prepared in a spirit of constructive criticism and we look forward to your response.

* * * * *

INTRODUCTION

It continues to be the policy of the San Francisco Bay Chapter of The Sierra Club to support a closely monitored program to maintain shipping channels in San Francisco Bay. Among the issues we regularly discuss with the EPA, the U.S. Army Corps of Engineers and the Port of Oakland are how and where the dredge material is utilized.

We applaud the approach being developed by the LTMS toward developing beneficial uses for dredged material such as wetland restoration, upland habitat creation and fisheries development.

Our goal is to eliminate dredged material disposal in the Bay. Several hundred million cubic meters of dredged material are being dredged annually worldwide. This dredged material is a potentially valuable resource (PIANC, 1992). We are actively working to develop alternative environmentally sound strategies that are beneficial to the Bay instead of continuing the present practice of dumping the material off Alcatraz with questionable regard for the consequences.



The DEIS presents a strategy that we view as a better alternative than disposal in the Bay. We accept that deep water site five is the best choice contained in this DEIS and we urge that dumping in the Bay be stopped.

* * * * *

ISSUES OF SPECIFIC CONCERN

Issues raised in the DEIS that are of particular concern to us relate to:

- A) Monitoring, surveillance and enforcement at the proposed dump site to assure compliance with regulations and procedures;
- B) Monitoring, surveillance and scientific observation at the proposed dump site to analyze the effects of dumping on resident benthic and pelagic species.
- C) The lack of development of a plan to monitor, survey and observe the impact of long term ocean dumping;
- D) The failure of the DEIS to state a preference for reusing dredged material, and;
- E) The monitoring, mitigation and description of environmental impacts on proximate marine sanctuaries;

* * * * *

- A) *Monitoring, surveillance and enforcement at the proposed dump site to assure compliance with regulations and procedures.*

Does the EPA have the budget, equipment, personnel and available expertise to monitor the dredging and disposal of six million cubic yards per year of material? The DEIS inadequately addresses these most important issues. The two sections of the DEIS dealing with monitoring, sections 3.1.4 (Feasibility of Surveillance and Monitoring) and 4.6.2 (Site Management and Monitoring) tell us that site management is the joint responsibility of the EPA and COE. Page 4-90 goes on to state that the United States Coast Guard, EPA and the COE are responsible for surveillance and enforcement of ocean disposal activities.

The DEIS does not explain how this monitoring, surveillance and enforcement is to occur. Will one agency be in charge of enforcement, a second in charge of surveillance and a third in charge of monitoring?

Monitoring, surveillance and enforcement should be guaranteed by the presence of a full-time EPA, COE or Coast Guard representative on board the barge containing the dredged material.

A quick analysis of the time and energy spent in the DEIS on these issues can be gleaned from the table of contents. Page ix

shows that page 3-19 is spent on both surveillance and monitoring. On page xii of the table of contents are the words "Site Management and Monitoring," but only two pages are devoted to the subjects (pages 4-90 and 4-91).

A thorough exploration of these issues can only be accomplished in a supplemental EIS. We call for the EPA to prepare this document so that these subjects receive treatment they require.

* * * * *

B) *Monitoring, surveillance and scientific observation at the proposed dump site to analyze the effects of dumping on resident benthic and pelagic species.*

It would be appropriate for the DEIS to expand its discussion of the site monitoring plan and the management options to be developed. The present discussion is brief and inadequate.

The DEIS explains how difficult it will be to monitor benthic and pelagic impacts at greater depths but says nothing about how to mitigate this problem. It states only that a site monitoring plan to detect and minimize adverse impacts through appropriate management options will be developed.

The EPA must conduct a thorough, publishable and scientifically peer-reviewed study of the effects of dumping six million cubic yards of dredge material in an area where during any particular month, the flow pattern may differ significantly from seasonal mean conditions (section 3.2.2.1, page 3-28).

Many studies cited in the section on the consequences of dumping dredge material on the biological environment at site five (4.2.2, page 4-47 to 4-63) have little to do with the actual site five environment. Hirota's 1985 study of the effects of deep-sea mineral mining on macrozooplankton is cited, Paffenhofer's 1972 study of the effects of fine-grained red bauxite muds on the survival, growth rates and body weight of a copepod is mentioned; we learned that few plankton appreciate bauxite muds.

There is no bauxite mud at site five, so why cite Paffenhofer? Hirota's concern with deep-sea mineral mining has little or nothing to do with deep sea dumping of dredge spoils (see section 4.2.2.1, page 4-47).

The DEIS states that benthic species in general do not survive rapid burial. Total mortality is inferred (See page 4-50, section 4.2.2.2). Also, the DEIS does not call for mitigation of the loss of these benthic species.

Based on minimal data, the DEIS concludes that the impacts of dredged material disposal on pelagic fishes will be insignificant. This conclusion is reached by logic presented in the DEIS as summarized below (see section 4.2.2.4, page 4-57):

- 1) Near-surface pelagic species (rockfishes, salmon, tunas, mackerels) become blinded in a disposal plume because of the increase in turbidity.

- 2) "Deep-water mesopelagic and bathypelagic species such as deep-sea smelts and lanternfishes characteristic of the region also should be able to avoid the disposal plums, although there are no specific studies on avoidance behavior in these fishes. Therefore, it is estimated that potential impacts of dredged material disposal on pelagic fishes will be insignificant, and classified as Class III."

There is no basis to draw a conclusion that deep-sea smelts and lanternfishes should be able to avoid the disposal plum. No study or evidence is cited.

The DEIS is fatally flawed in its attempt to analyze the effects of dumping on resident benthic and pelagic species.

* * * * *

- C) *The lack of development of a plan to monitor, survey and observe the impact of long term ocean dumping.*

By reference we incorporate comments made by Heller, Ehrman, White & McAuliffe on behalf of their clients, the Half Moon Bay Fisherman's Marketing Association (HMBFMA 1993) in this document. We agree that not committing to a monitoring plan fatally flaws the DEIS.

On pages 4, 5, and 6 of the HMBFMA response they thoroughly analyze the inadequacy of EPA's commitment to a monitoring plan. By leaving out this important issue the EPA shows a lack of concern for the long term effects of this proposed dumping on the environment of the area.

We repeat that The Sierra Club cannot support this DEIS until a supplemental EIS is prepared, hopefully in consultation with the LTMS, to address these concerns. Otherwise the present document fails to address a these key issues.

* * * * *

- D) *The failure of the DEIS to state a preference for reusing dredged material;*

Developing environmentally and economically sound alternatives to in-Bay disposal is a continuing goal of the LTMS.

We urge the EPA to support agencies within the LTMS who are working toward development of the reuse of dredged material.

The beneficial use of dredged material is an available option that is being currently developed by the LTMS. We feel that the DEIS prematurely proposes long-term use of site five without taking the work of the LTMS into consideration.

The DEIS ignores the dredging findings and policies of the San Francisco Bay Plan. The Bay Plan's dredging policies No. 2, 4, and 5 state the preference for disposal of material from dredging projects at non-tidal (preferably for beneficial uses) or ocean sites. A more thorough discussion of these non-tidal sites for

beneficial uses should be made a part of the DEIS. A discussion of both ocean dumping and beneficial uses of dredged material as a resource could lead to a balanced dredging policy.

* * * * *

E) *The monitoring, mitigation and description of environmental impacts on proximate marine sanctuaries.*

Page 4-63 of the DEIS, last paragraph classifies potential disposal impacts as Class II (significant adverse impacts that can be mitigated to insignificant levels). No data is given to support this conclusion.

The DEIS states that the volume of material to be released by a single incident (accident?) would be 6,000 cubic yards for a single barge load. No data is given to support this conclusion (page 4-63, 3rd paragraph).

The DEIS fails to include in its limited description of "incidents" scenarios exploring the probability of bilge material or bunker fuel discharge into a marine sanctuary. The impact of such an "incident" on the Farallon Islands, which lies on the direct route of barges in transit from San Francisco Bay to preferred alternative site five, would be at least a Class I adverse impact that would be nearly impossible to mitigate.

Page 2-38 of the DEIS (Alternative Site 5) states as follows:

"Dredge barge transit could cause some interference with recreational and scientific boat traffic, particularly near the Farallon Islands. Under normal conditions, no interference with areas of special importance is expected; however, accidents resulting in releases of material near the Farallones may be a concern. A requirement for barges to avoid the Farallones vicinity could minimize potential impacts."

We appreciate the above acknowledgement by the DEIS of the possibility of accidents resulting in the release of material near the Farallones. Many types of material could be released including bunker fuel, bilge material, accumulated sewage, and untreated contaminated dredge spoils.

This concerns us because for many species, the Farallon Islands breeding population is a significant percentage of the world population. In addition, the masses of marine birds that pass through the area on route to other areas depend upon productive waters to sustain them during their journey (Marine Audubon Society 1993).

Given these facts we conclude that a more thorough discussion of the impacts to marine sanctuaries, especially the Farallon Islands, is required.

CONCLUSION

The Sierra Club cannot support this DEIS unless a supplemental EIS is prepared, hopefully in consultation with the LTMS. The DEIS fails to address key issues surrounding the proposed project and is fatally flawed in many areas.

The Sierra Club would be happy to cooperate with the EPA in developing such a document.

There are many ways dredge material can be used as a beneficial resource rather than as a waste to be dumped. With proper planning and coordination between all parties environmentally beneficial solutions will emerge.

Sincerely,

James P. Royce
Conservation Advocate
San Francisco Bay Chapter

JPR:cl

REFERENCES

HMBFMA 1993: Response by Heller, Ehrman, White & McAuliffe on behalf of the Half Moon Bay Fisherman's Marketing Association (HMBFMA) dated January 22, 1993 reading as follows:

C. *The DEIS Fails to Commit to Monitoring the Impacts of Long-Term Ocean Dumping and Therefore Fails to Provide Adequate Mitigation*

The DEIS recognizes that EPA's regulations require that even after a site is chosen, its use must be discontinued if it becomes apparent that the site "does not meet the criteria set forth" in the site designation regulations (Page 2-30). Nevertheless, EPA never commits to a monitoring plan that would determine the actual (as opposed to modeled) impacts of the proposed disposal, and the performance of dredgers.

The assurance in the DEIS that an adequate plan will be developed once the site is approved (pages 3-19, -20, 4-87) is a classic example of "piecemealing" the environmental analysis, a clear violation of NEPA. Monitoring, for NEPA purposes, is essentially a mitigation measure. Without proper monitoring, there can be no assurance that: (1) permit conditions are being complied with; (2) dredge spoils are staying in place as expected; and (3) the environmental impacts of disposal in the ocean are not significant. Hence, monitoring is necessary to support EPA's conclusion that the proposed ocean disposal will not cause significant impacts.

However, the DEIS hedges on whether or not monitoring will actually occur. The DEIS "assumes" that equipment and vessels will be available. This is not a commitment, and indeed, rings hollow following EPA's public admission at the last LTMS meeting of the Policy Review Committee that monitoring in any given year would be subject to the vagaries of EPA's budget appropriations. What is the

public to expect if the funds for equipment and vessels are not available, contrary to the DEIS' assumption? Moreover, the EIS' entire discussion of site managing and monitoring is phrased in self-consciously non-committal, equivocal terms. It is entirely unclear from reviewing Section 4.6.2 which of the various site management options, if any, will be employed.

EPA's plan to develop a monitoring proposal for inclusion in the Final EIS cannot be sustained under NEPA. To a large extent, the question of whether a site should be designated hinges on whether potential impacts can be effectively mitigated. Monitoring is of special mitigation significance for this project since EPA's conclusions that the project will not cause significant impacts are based almost entirely on modeling studies. The only way to mitigate against inaccuracies and/or unforeseen circumstances in the model predictions is to monitor dredger performance and impacts of the disposal. Therefore, the strength of the modeling program is a fundamental aspect of the project, and should be a major component in the determination of whether or not to proceed.

The Final EIS will be released along with the final decision on the project. Any comments on this final document are therefore superfluous and irrelevant to the decision-making process which will have ended. In order to comply with NEPA it is critical that all vital project components be placed before the public and decision makers prior to and not after the decision has been made to proceed.⁴

By putting off the development of a monitoring plan until after the project has been approved, EPA is essentially saying to the public and decision makers; "Trust us. The monitoring plan will be just fine." We have the greatest confidence in the integrity and sincerity of EPA in this regard. Nevertheless, NEPA demands and we must insist that the full project be placed before the public at one time. The monitoring plan is a critical aspect of the project, and project approval should not be provided unless it is absolutely clear in the EIS that monitoring of dredgers' performance and disposal impacts is part of the project being approved.

The DEIS provides no rationale for why this critical part of the project has been cut out of the EIS process. The flaws in this decision are apparent. For example, the DEIS speculates that "management action" such as limits on disposal volume or timing may be taken if monitoring indicates that negative impacts have occurred. HMBFMA would recommend that EPA implement such "management activities" prior to the occurrence of negative impacts in order to avoid them. If the monitoring plan were part of the EIS, issues like this would be exposed to the "hard look" Congress intended. HMBFMA concurs with the comments submitted by the Gulf of the Farallones National Marine Sanctuary, and incorporates them herein by reference. In particular, we agree with the recommendations of the Sanctuary Manager that: (1) independent observers must be required to study environmental conditions, and not the dredge operators; and (2) the models must be independently verified.

4. EPA has suggested informally that the public will be able to comment on the monitoring plan in the rulemaking process. By this time, however, the ocean site will have already been designated. Thus EPA is attempting to isolate the decision about the ocean site from any decision about monitoring. Our point is that without an adequate monitoring plan, the site should not be designated at all.

Without a clear and unqualified commitment to monitoring both the performance of dredgers and the environmental impacts of dredged material disposal at the proposed site, HMBFMA cannot support the project as proposed. We will urge our fellow commercial and recreational fishermen, and environmentalists to adopt similar positions.

Marine Audubon Society 1993: Response by Marine Audubon Society dated January 25, 1993 reading as follows:

The information provided does not support a finding of no significant impact on seabirds, marine mammals and endangered species. For many species, the Farallones breeding population is a significant percentage of the world population. In addition, masses of marine birds pass through the area on route to other areas depending on productive waters to sustain them on their journey. The area is an important movement corridor for marine mammals. Disposal of dredged material will impact presence of prey and the visibility of prey items. Turbid plumes could have a significant effect on nesting sea birds, particularly during El Nino years when fish populations are down, if they have to travel further from breeding sites to forage. Populations of many species are already low due to gill netting and El Nino. The DEIS should recommend seasonal limitation to minimize adverse impacts on Farallone breeding populations.

PIANC 1992: Permanent International Association of Navigation Congresses (PIANC), General Secretariat, Brussels, Belgium, *Beneficial Uses of Dredged Material, A Practical Guide*, Page 9.

SCHNITZER STEEL PRODUCTS

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Phone (510) 444-3919 FAX (510) 444-3370



April 27, 1994

Roger Golden
Environmental Branch
U.S. Army Corps of Engineers
211 Main Street
San Francisco, CA 94105-1905

Dear Mr. Golden:

1 | Having reviewed the Draft Supplemental Environmental
Impact Report/Oakland Harbor Deep-Draft, we urge the Corp.to
proceed according to the recommended plan with all
deliberate speed. We concur that the project will provide
net national benefits to maritime commerce in the Estuary.

Sincerely,

Gary Schnitzer,
Executive Vice President

cc: Jody Zaitlin
Environmental Department



WAYNE K. HORIUCHI
SPECIAL REPRESENTATIVE

UNION PACIFIC RAILROAD COMPANY



915 L STREET, SUITE 1230
SACRAMENTO, CA 95814
(916) 442-2800
FAX (916) 442-4073

April 21, 1994

Corps of Engineers
San Francisco District
Environmental Branch
211 Main Street
San Francisco, CA 94105

To Whom it May Concern:

On behalf of Union Pacific Railroad, I write to support the proposal to allow for the shipping channels to be dredged to -42 feet at the Port of Oakland.

This proposal will allow for a more efficient transportation of freight through California that will benefit the health of the California economy. But even more importantly, this project has undertaken a number of safeguards to protect the environment.

Union Pacific Railroad is a major transportation artery to the Port of Oakland. This project will expand the competitive options for the shipping community and will benefit our railroad substantially.

Therefore, we wholeheartedly support the project proposed by the Port of Oakland and urge a swift, yet careful, analysis of the Draft Supplemental Environmental Impact Report.

I am,

Sincerely,

A handwritten signature in dark ink, appearing to read "Wayne K. Horiuchi". The signature is fluid and cursive, with a large, sweeping initial "W".

Wayne K. Horiuchi
Special Representative

cc: Thomas W. Gwyn, Port of Oakland
Joe Bateman, Union Pacific Railroad, Omaha
Joe Bearden, Union Pacific Railroad, Los Angeles

portoak.ltr



4

May 2, 1994

LF 2393.00-002

Roger Golden
Environmental Branch
U.S. Army Corps of Engineers
211 Main Street
San Francisco, California 94105

Jody Zaitlin
Port of Oakland
Environmental Department
530 Water Street
Oakland, California 94607

Subject: Comments on Draft Supplemental Environmental Impact
Report/Environmental Impact Statement, Oakland Harbor Deep-Draft
Navigation Improvements, March 1994

Dear Mr. Golden and Ms. Zaitlin:

- Enclosed are Levine•Fricke's comments on the Draft Supplemental Environmental Impact Report/Environmental Impact Statement for the Oakland Harbor Deep-Draft Navigation Improvements, dated March 1994 (Oakland DSEIR/EIS). These comments pertain to the Montezuma Wetlands Project (MWP) as a dredged sediment disposal site for alternatives B1, C1 and C2, and they supplement Levine•Fricke's comments sent March 30, 1994 on the February 14, 1994 Draft Fish and Wildlife Coordination Act Report for the Oakland project. General comments are provided below and more specific comments on biological resources are attached to this letter.
- 1
- 2
- Levine•Fricke's primary concern with the Oakland DSEIR/EIS is the inaccurate characterization of potential adverse biological impacts reported for the MWP. These impacts are either not factually supported or are not significant because mitigation measures were included in the original MWP proposal but ignored in the Oakland DSEIR/EIS. First, the MWP is supported by extensive site data and information, the quality and abundance of which is unprecedented for wetlands restoration projects in the region. These data were not used in the Oakland DSEIR/EIS; instead, it unfortunately relied upon a preliminary Administrative Draft EIR/EIS for the MWP (MWP preliminary ADEIR/EIS). We recommend that the analyses of the MWP be based upon existing data

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rather than on filtered data in the MWP preliminary ADEIR/EIS. Second, the Council on Environmental Quality states, "...where the proposal itself so integrates mitigation from the beginning that it is impossible to define the proposal without including the mitigation, the agency may then rely on the mitigation measures in determining that the overall effects would not be significant..." (46 FR 18026-18037, 1981). If the Oakland DSEIR/EIS examined the MWP proposal in its entirety, including the mitigation measures incorporated into its design, several of the identified "significant" impacts would be eliminated.

Summary of Comments on Biological Resources

Levine•Fricke finds the reported level of anticipated adverse impacts to existing biological resources perplexing. We have collected far more baseline biological data than collected for any other disposal alternative. The purpose of these data has been to support the restoration design and regulatory process. However, these data are being erroneously interpreted and applied, and thus the MWP is being penalized for this greater knowledge base, relative to other disposal alternatives, by having more impacts identified. This approach is counter-intuitive to the environmental review process, unsupportable under scientific review, and certainly does not promote enhancement of this Estuary's ecological resources.

There are four main problems in the Oakland DSEIR/EIS regarding discussion of biological resources for the MWP:

- The statements of biological resource impacts are not supported by existing data because several of the impacts are based on a misinterpretation of the data and because the existing wetlands resources at the MWP site are rated too highly, especially for the Phase I area where the Oakland dredged sediment would be placed.
- The document confuses discussion of the entire MWP site with that portion of the MWP site that would be used for Oakland dredged sediments, sometimes considering the 600-acre Phase I area (where the Oakland sediments would be placed) and sometimes considering the entire 1,800-acre project.
- The ecological benefits of the proposed wetlands restoration at the MWP site are in large part omitted from the overall impact analysis (benefits and detriments).
- The analysis fails to note that many of the identified adverse impacts have been recognized by Levine•Fricke and efforts to avoid, minimize and compensate for them have been incorporated into the design previously submitted for regulatory approval. The Oakland DSEIR/EIS identifies various impacts that the MWP as

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proposed would not produce, and then recommends as "mitigation" to reduce those supposed impacts various measures that are already integral components of the MWP as proposed.

We understand that analysis of the MWP in the Oakland DSEIR/EIS relied primarily on information available from the in-progress MWP preliminary ADEIR/EIS. Unfortunately, that report contained many misstatements and inaccurate analyses that have since been revised. Consequently, many of the same mistakes were simply carried forward into the Oakland DSEIR/EIS. We appreciate that the Oakland DSEIR/EIS correctly notes on page 3.4-43, lines 40-42 that the biological resources section of the Oakland DSEIR/EIS will be revised in the Oakland Final SEIR/EIS pending three actions: clarification of Phase I of the MWP, revision to the MWP preliminary ADEIR/EIS, and baseline information verification.

Solutions to these three problems are at hand. We have prepared the attached specific comments in order to correct the continuing mischaracterizations regarding the MWP. First, specific items in the attached comments should clarify the Phase I portion of the MWP. Second, baseline information can be verified directly with the original data: Technical Report (Levine•Fricke 1992), Supplemental Rare Plant Survey (Levine•Fricke 1993a), and Draft Salt Marsh Harvest Mouse Mitigation Plan (Levine•Fricke 1993b). Many of our comments identify where to locate the appropriate data. Finally, it is our hope that the MWP Draft EIR/EIS will soon be released and that its revisions will help to resolve the existing mischaracterizations.

Cost Calculations

4

As presented in Table 7.2.1-1 on page 7-4 of the Oakland DSEIR/EIS, MWP costs in Alternative B1 are higher than for Alternative B2 (which replaces MWP with deep ocean, Sonoma Baylands and Galbraith Golf Course disposal sites). These figures do not reflect recent cost data developed by Levine•Fricke. Incorporation of more recent MWP cost data would lower the value derived for Alternative B1. We recommend that the Oakland Final SEIR/EIS incorporate the MWP cost data previously provided, that it present the financial basis for each alternative rather than refer the reader to another document, and that it consider in its cost analyses an additional disposal alternative described immediately below.

5

Alternatives Analysis and Identification of the Preferred Alternative

The Oakland DSEIR/EIS shows that Alternative B1 (MWP, ocean, and Port/landfill) achieves the greatest amount of wetland restoration and the minimum amount of aquatic disposal of those alternatives considered (Table 2.8-1, page 2-54). These two goals are

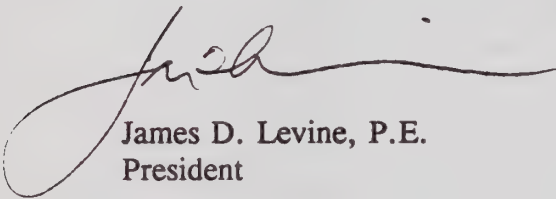
central goals identified in the Oakland DSEIR/EIS for disposal of the Oakland dredged sediment. Alternatives B2 and B3 send 1.8 million cubic yards to the ocean whereas alternative B1 sends only 0.1 million cubic yards to the ocean.

The Oakland DSEIR/EIS states that the MWP "would have significant adverse impacts on existing wetlands habitat and sensitive species" and thus was "assigned significant unavoidable adverse impacts" (page 6-9, lines 9-15). Since these conclusions were based on the incorrect and outdated MWP preliminary ADEIR/EIS, use of existing site data and designs in the Oakland Final SEIR/EIS and subsequent decision-making process should revise the exclusion of the MWP from the preferred alternative.

To fully achieve the two primary goals for disposing of the Oakland dredged sediment, we recommend that one additional alternative be considered in the Oakland Final SEIR/EIS: Sonoma Baylands (2.6 million cubic yards), MWP (3.1 million cubic yards), and Port/landfill (0.1 million cubic yards). This alternative provides all dredged sediment necessary to restore wetlands at the Sonoma Baylands site and entirely eliminates ocean and Galbraith Golf course disposal. We believe that this alternative, when the environmental impacts are correctly assessed and the costs calculated, will be the least costly and most environmentally acceptable and feasible plan that includes maximum habitat restoration and minimum aquatic disposal.

Thank you for considering these comments. If you have any questions, please contact me, Douglas S. Lipton, Ph.D., or Stuart W. Siegel at (510) 652-4500.

Sincerely,



James D. Levine, P.E.
President

enclosure

cc: Distribution List

Distribution List

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 Pietro Parravano, Half Moon Bay Fishermans Association

May 2, 1994

LF 2393.00-002

**Comments on Draft Supplemental EIR/EIS
Oakland Harbor Deep-Draft Navigation Improvements
Biological Resources**

The Oakland DSEIR/EIS treatment of existing and expected biological resources at the Montezuma Wetlands Project (MWP) site does not accurately depict the MWP's environmental impacts, either beneficial or detrimental. As a consequence, the Oakland DSEIR/EIS does not correctly compare disposal alternatives or provide a clear basis for choice among them. The reason for these problems is the reliance upon an unfinished MWP preliminary ADEIR/EIS. We recommend direct examination of the original data and current MWP design (Levine•Fricke 1992, 1993a, 1993b) to solve these problems. 6

Ecological Benefits of Montezuma

The ecological benefits of the proposed MWP are largely overlooked in the Oakland DSEIR/EIS and omitted from the overall impact analysis. Table S-2 on page S-9 lists a number of mitigation measures designed to address the supposed MWP impacts. However, the analysis that supports the impacts summary fails to consider the beneficial nature of the MWP as a marsh restoration project. The ecological goals for the MWP are:

to replace a low-productivity, highly disturbed landscape that supports greatly diminished functions and values with a high-productivity, highly diverse tidal brackish and seasonal marsh that (a) increases both the diversity and magnitude of wetlands functions and values, (b) supports the largest possible assemblage of endangered and threatened species of the region, including aquatic and wetland species, and (c) replaces in kind at a greater than 1:1 ratio all existing wetlands functions, values, and acreage.

The restored marshlands would create a diverse tidal and seasonal marshland ecosystem encompassing low and high marsh plain, large and small intertidal channels, ponds, upland refugia, and an upland buffer. Marsh restoration at the MWP site is especially important in regional ecological recovery of numerous special status species due to its size, location within the brackish portion of the San Francisco Estuary, and its unique mixture of ecosystem components. The importance of restoring marshlands at the MWP site has been long recognized and was explicitly identified in the 1976 Suisun Marsh Protection Plan.

- 7 | The regional community of environmental scientists and wetlands advocates expects that the MWP can achieve this purpose, and expects that the optimal plan will evolve through the regulatory process and final design efforts.

Unfortunately, the piecemeal approach to the environmental analysis of the MWP has lost perspective on the ecological goals of the MWP. The U.S. Fish and Wildlife Service (USFWS) recognized the considerable potential ecological benefits of the MWP in its February 1994 Draft Fish and Wildlife Coordination Act Report for this Oakland Harbor dredging project (USFWS 1994). In that report, USFWS notes that the MWP would increase the acreage of tidal brackish marshlands between the Delta and Carquinez Strait by over 20 percent (or nearly 6 percent for the entire San Francisco Bay Area) and that it is "likely to support a high diversity of species...[that] are severely limited in aerial extent." The Oakland DSEIR/EIS has correctly highlighted ecological benefits of the Sonoma Baylands project, which include an increase of approximately 1 percent in total acreage of tidal marshlands in the San Francisco Bay Area (see page 4.4-41, lines 13-22). A similar statement simply needs to be included for the MWP and we recommend inclusion of the USFWS language on page 142, paragraph 2 of its report (USFWS 1994).

Mitigation of Adverse Impacts

- 8 | Every potential impact of the MWP stems from activities to restore wetlands. The impacts are presented in Table 4.4.5.8-1 as adverse impacts that can only be addressed through implementation of proposed wetlands design elements. The wetlands design for the MWP has anticipated these potential impacts and has incorporated measures to avoid, minimize, or compensate for them (Levine•Fricke 1992, 1993a, 1993b). Table 4.4.5.8-1 presents these impacts and mitigation measures without recognition that the recommended measures are already incorporated into the MWP design, thereby misleading the public and presenting an inconsistent analysis of the MWP compared to the other sediment disposal alternatives for the Oakland dredging project.

We recommend that the original technical reports be reviewed directly, in particular the March 1993 Draft Salt Marsh Harvest Mouse Mitigation Plan (Levine•Fricke 1993b), since it was not fully incorporated into the MWP preliminary ADEIR/EIS made available for the Oakland DSEIR/EIS.

9 | Placement Location at Montezuma for Oakland Sediments

The Oakland DSEIR/EIS confuses portions of the MWP site that would and would not be used to place Oakland dredged sediments, sometimes considering the 600-acre Phase I area (where the Oakland sediments would go) and sometimes considering the entire 1,800-acre MWP site (much of which would not be used to transport or place the Oakland sediments).

The analysis of potential environmental impacts of placing Oakland dredged sediments at the MWP site should focus only on those portions of the site affected by the Oakland sediments: Phase I for sediment placement and the offloading facility and sediment transport pipeline for offloading and distributing the dredged sediment. No other portion of the MWP site is relevant to the Oakland project.

An example of this confusion is found on page 3.4-44. Lines 28-38 refer to plant patch types found in Phase I, and should therefore be retained. The preceding paragraph (lines 17-26) is a general statement about the entire site and about the limited seasonal wetlands values in other phases of the MWP. That paragraph needs to state explicitly that Phase I does not contain any significant wetland resources. No statements about existing seasonal wetlands values apply to Phase I, and only Phase I applies to Oakland. Thus, existing wetland resources at the MWP site are not part of any equation relating the Oakland project and the MWP.

As a point of correction, the text on page 3.4-44, lines 28-29 erroneously states that the effort to map wildlife habitat contributed to the classification of plant patch types. In actuality, wildlife habitat mapping followed the vegetation mapping.

Impacts to Existing Biological Resources

The Phase I area of the MWP currently supports scant natural resources of any kind. This determination, supported by the extensive biological data collected during at least one-year field surveys of vegetation, rare plants, small mammals, and avian resources (Levine•Fricke 1992, 1993a, 1993b), was used as the basis to select the Phase I area as the initial phase of the MWP. It is important that the Oakland DSEIR/EIS verify these baseline data against the three references cited above.

Phase I is identified in the Oakland DSEIR/EIS as causing a total of 12 adverse biological impacts; seven are identified in Table S-2 and another five are identified in Table 4.4.5.8-1. Most of these impacts are either not factually supported by the existing MWP site biological data or have long been recognized and incorporated into the MWP design. Each impact is addressed below.

1. *Elimination of Jurisdictional Wetlands and Seasonal Wetlands Values* (Table S-2 #1; page 4.4-47, lines 17-25; Table 4.4.5.8-1 #8)

The Oakland DSEIR/EIS states that Phase I would "eliminate 576 acres of existing, on-site jurisdictional wetlands" (page S-9). This statement is incorrect. Phase I currently contains 576 acres of jurisdictional wetlands of minimal value. When restoration is complete, Phase I will contain 600 acres of high value jurisdictional wetlands, an increase of 24

10

acres and considerable wetlands values. Thus, there will be no loss of jurisdictional wetlands in Phase I. Further, the original wetlands delineation was not exhaustive because the MWP is a wetlands restoration project. Wetlands jurisdiction was assumed to exist, whether present or not, and the delineation directed to identify some of the non-wetlands acreage in order to document the increase in jurisdictional wetlands accrued through implementation of the MWP.

The enumeration of affected areas on page 4.4-47, lines 21-24 contain some errors carried forward from erroneous map analysis presented in the MWP preliminary ADEIR/EIS. In Phase I there does not exist 2 acres of brackish marsh nor 9 acres of open water. The 2 acres of brackish pond identified on page 4.4-47 are actually 1.2 acres of hypersaline intermittent pond. The 15 acres of seasonal pickleweed marsh are the intermittently vegetated steep banks of the agricultural ditches that drain Phase I of the MWP site.

Phase I supports 1.2 acres of seasonal wetlands total. The Oakland DSEIR/EIS incorrectly states that the jurisdictional wetlands in Phase I "provide seasonal wetland habitat values" (page 4.4-48). The Oakland DSEIR/EIS correctly notes that seasonal wetlands values at the entire MWP site are associated with the "saline basins" and that these areas are poorly represented in Phase I (again, 1.2 acres total; see page 3.4-46, lines 29-30 and 37-39). However, the Oakland DSEIR/EIS then incorrectly concludes that Phase I provides "important seasonal wetland values...primarily in the saline basins scattered over the site" (page 3.4-46, lines 3-4). The Oakland DSEIR/EIS needs to state that seasonal wetlands values are associated only with saline basins and that those areas are essentially absent from the Phase I area (they are in other parts of the MWP site).

Finally, Phase I will restore 315 acres of high marsh, 31 acres of ponds, 237 acres of low marsh, and 17 acres of channels (Table 1 in Levine•Fricke 1993b). All these areas are subjected to tidal action to varying amounts based on elevation. The statement on page 4.4-47, lines 25-26 that the MWP will create 315 acres of tidal salt marsh should be replaced with these data. The term "tidal salt marsh" does not apply to the MWP. Tidal salt marshes in the San Francisco Estuary are the pickleweed-cordgrass marshes found throughout the San Pablo, Central and South bays, which are saline. Salt marshes are not found in the Suisun Bay region but instead are replaced by tidal marshlands, which are brackish, that support a far greater plant species richness.

11

2. *Leaching or Plant Uptake of Contaminants in Dredged Sediments and Subsequent Potential Food Chain Exposure*

(Table S-2 #2; page 4.4-47, lines 26-28; Table 4.4.5.8-1 #4)

The statement that "plant uptake of contaminants could occur" at the MWP mischaracterizes all wetlands restoration projects. All sediments in which marsh plants at

the MWP will be growing (i.e., "cover" sediment) would be the same as for Sonoma Baylands. Therefore, the same conclusion for Sonoma Baylands should be drawn for the MWP.

The non-cover sediment at the MWP will be isolated from the surface by 3 feet of "cover sediment." The question thus arises whether plant root depths will penetrate deeper than the 3-foot layer of "cover" sediment. To answer that question, a search of world-wide scientific literature regarding uptake, rhizosphere, and rooting depth of wetlands or marshland vegetation has been completed recently. That search utilized computer-based literature indexing services and the natural resources and biology libraries at UC Berkeley. The following results on plant root depths comprise information not previously available for the Oakland DSEIR/EIS nor the MWP preliminary ADEIR/EIS, and thus need to be incorporated directly. The results of the literature search include a few hundred scientific articles and books published in the last 25 years that are either written in English or have English summaries or abstracts. The bibliography developed by this search is available upon request from the Aquatic Habitat Institute.

The basic findings are as follows:

- Rooting depth decreases with distance from water courses through any type of wetlands.
- Rooting depth might extend to 1.5 meters (m) for herbaceous and monocot vegetation only within the zone of drawdown of channels in fully tidal marshland.
- In areas of tidal marshland interior to the drawdown zones of channels, maximum rooting depth for herbaceous or monocot vegetation does not extend below 75 centimeters (cm), and mostly does not extend below 40 cm.
- Rooting depth in tidal marshland can extend below 1.5 m only for some trees, including some species of *Eucalyptus* and *Pinus*, and these are mainly restricted to artificial or natural high ground above regular tidal influence.

Potential leachate impacts noted on page 4.4-47, line 26 were already deemed insignificant in the water quality section of the Oakland DSEIR/EIS (pp. 4.2-65 to 4.2-67). Thus, it is inappropriate to insert this unsupported impact into the biological resource impacts section. The water quality conclusions are further supported by leaching tests conducted under conservative conditions on Port of Oakland sediments indicate that leaching of contaminants will not be significant (Patrick 1990 and Lee et al. 1993). Patrick (1990) states on p. 22 of his report that "sediment samples taken from Oakland Inner Harbor

11 ↑ showed no acidification and no significant release of toxic heavy metals into the water phase."

12 3. *Vernal Pools*
(Table S-2 #3; Table 4.4.5.8-1 #5)

The disturbance patches in the restoration area referred to as "alkali vernal pools" are incorrectly equated with natural "hardpan clay vernal pools." These disturbance patches result from a combination of influences including the historical tidal marshlands, grazing, artificial obstructions to drainage, and nearby (upslope) vernal pool ecology. The natural hardpan clay vernal pools throughout Solano County, Central Valley and elsewhere in California are of conservation concern, not the two ill-defined, vernal wet areas within the Project boundary that only superficially resemble the natural hardpan clay vernal pool features.

For the natural vernal pools that occur outside the wetlands restoration area, Levine•Fricke has already incorporated avoidance into the MWP design. For the 1.2 acres of "alkali vernal pools" within the restoration area, Levine•Fricke is examining various means of compensating for these resources and in this regard has initiated discussion with the Department of Fish and Game.

4. *Habitat and Populations of Sensitive Plant Species*
(Table S-2 #4; Table 4.4.5.8-1 #6 and #7)

13 The Oakland DSEIR/EIS fails to note that potential impacts to sensitive plant species have been addressed in the MWP design (Levine•Fricke 1992, 1993a). The few populations or individuals of sensitive plant species are mostly limited to the outboard (intertidal) side of the perimeter levee and in the upland buffer zone. Avoidance of these locations is the primary mitigation strategy already incorporated into the MWP design. Creation of extensive habitat at a ratio far greater than 1:1 makes up the remaining mitigation strategy. This "mitigation" habitat is a direct consequence of restoring tidal and seasonal marshlands at the MWP site, the consideration of which was omitted from the impact analysis.

Mason's lilaeopsis and Delta tule pea exist in very limited places along the outboard portion of the existing perimeter levee. These locations have been mapped (Levine•Fricke 1992, 1993a). There are no intertidal areas behind the levees at the MWP site, and thus no intertidal habitat will be used for wetlands restoration.

The only MWP activities that will occur in intertidal areas are levee breaches (one for Phase I) and an offshore sediment offloading facility that will have a 4-foot-wide walkway suspended from the levee top to the floating offloading equipment. Levee breaches have

been sited to avoid existing mapped populations of sensitive plant species. Thus, the only potential impact is from marine wake in the vicinity of the offloading facility, where Mason's lilaeopsis occurs intermittently along 1,200 feet of the perimeter levee. This levee reach is already subject to wake and wave action from shipping traffic and wind fetch, respectively. In fact, the Mason's lilaeopsis exists on a thin veneer of clay and silt over rock riprap placed to protect the levee from wake and wave action.

Mitigation measures for potential impacts have been included in the MWP design. Levee breach locations have been sited to avoid sensitive species. Potential wake impacts would be offset at a ratio far greater than 1:1 by the creation of tidal channels, a fundamental design component of the MWP which will provide miles of intertidal channel bank habitat for both species.

The Oakland DSEIR/EIS should note that only a few individuals of San Joaquin saltbush were identified, and these occur in the upland buffer zone adjacent to Phase I. Wetlands restoration will not occur in the upland buffer zone, and construction activities will avoid sensitive species or habitats.

5: *Raptor Foraging Habitat*
(Table S-2 #5; Table 4.4.5.8-1 #9)

There would not be a loss of 724 acres of raptor foraging habitat in Phase I, as stated in Tables S-2 and 4.4.5.8-1. This "potential" impact is another example of omitting recognition of the MWP purpose, of confusing Phase I with the entire MWP site, and of failing to examine data provided in Levine•Fricke (1992). Phase I is being converted from a very unproductive, sparsely vegetated grassland that supports minimal raptor foraging habitat to highly productive and diverse tidal and seasonal marshland. Of the five raptor species noted in Table 4.4.5.8-1 meant to show existing raptor use of the MWP site, only two are common at the site (northern harrier and black-shouldered kite) and these species were ubiquitous across most habitat types. Raptor pellet analysis revealed reliance upon invertebrate food resources and minimal foraging for small mammals (probably due to their poor representation at the site; Levine•Fricke 1992). In addition, both species were transient between the MWP site and adjacent diked baylands of Grizzly Island. Two other transient species were very rarely observed during the one-year avian survey (prairie falcon and golden eagle) and one was less rarely observed (ferruginous hawk; Tables 2-12 and 2-13, Levine•Fricke 1992). None of these latter species were ever observed feeding at the MWP site or in any way restricted to Phase I or its component vegetation patch types.

This information leads to several important conclusions: the MWP site, especially Phase I, is not providing significant ecological functions for these raptors; the commonly-observed

14 species can utilize any habitat type at the site, and thus would not be expected to suffer any foraging habitat loss; and these species are likely to be either positively affected or unaffected by the proposed wetlands restoration at the MWP site (see Table 7-3 in Levine•Fricke [1992]). Consequently, identification of this potential impact does not appear to be supported by the baseline data and thus its inclusion should be reconsidered.

15 **6. *Habitat for Sensitive Bird, Amphibian and Reptile Species***
(Table S-2 #6; Table 4.4.5.8-1 #10, #11, #13, and #14)

Levine•Fricke has long recognized the occurrence, potential or real, of sensitive bird, amphibian and reptile species. This recognition guided our collection of extensive field data on avian resources. Table 2-13 in Levine•Fricke (1992) reports the findings for sensitive bird species from the one-year survey performed by Jules Evens and Rich Stallcup of the Point Reyes Bird Observatory. They observed three to six mating pairs of burrowing owls in artificial fill along the perimeter levee or in agricultural drainage ditches. They reported that the local loggerhead shrike population appears to be stable. They also reported that the local horned lark population is of uncertain race and that only one race is deemed a sensitive species. Mr. Evens and Mr. Stallcup indicated an unavoidable adverse effect on these three species. Levine•Fricke (1992) indicated that mitigation can be provided for these three species within the upland buffer zone and/or along upland refugia within the restoration area. Thus, we concur with and have already incorporated these mitigation recommendations.

Levine•Fricke has already completed some field surveys for reptile and amphibian species and has concluded an agreement with the USFWS for additional field surveys at the time of project implementation (Levine•Fricke 1993c). That agreement also laid out several mitigation scenarios. This agreement is another example where a potential impact is presented in the Oakland DSEIR/EIS but where recognition is omitted that Levine•Fricke has already anticipated and responded to the issue. Consequently, we concur with the mitigation recommendation presented in Table 4.4.5.8-1, since it directly reflects our actions of January 1993.

16 **7. *State and Federally Listed Sensitive Fish Species***
(Table S-2 #7; Table 4.4.5.8-1 #15)

This potential impact and mitigation measure is another example where the likely ecological benefits of the MWP have been omitted from the analysis. The MWP site currently supports zero fisheries values. Restoration of 1,800 acres of tidal and seasonal marshland (600 acres in Phase I where Oakland sediments would be placed) will provide important fisheries values where none now exist, a beneficial and foreseeable impact. Additionally, the MWP will increase by 20 percent the acreage of tidal brackish

marshlands (important nursery habitat) in a region of the Estuary particularly vital to special status fish species. For example, anadromous fish (e.g., salmon) must undergo physiological changes when migrating from freshwater spawning habitat to the saline marine habitat. Tidal marshlands are nursery areas vital to these fish. The USFWS recovery teams for Delta fish species, and the National Marine Fisheries Service team for the winter-run chinook salmon, have indicated in meetings that they regard the MWP as beneficial to sensitive fish species in the region.

8. *Temporal Loss of Wetland Vegetation* (Table 4.4.5.8-1 #1)

There will be little if any temporal loss of wetland vegetation in Phase I, as stated in Table 4.4.5.8-1 in the Oakland DSEIR/EIS. This potential adverse impact is another example of three shortcomings of the environmental analysis: failure to recognize the purpose of the MWP (to restore tidal and seasonal marshlands); lack of correlation between baseline information and the impact analysis; and failure to recognize that most potential impacts have been previously identified and mitigation measures have been incorporated into the MWP design. Phase I of the MWP site where the Oakland sediment would be placed supports virtually no wetlands vegetation (see page 3.4-44, lines 34-36); thus the Oakland project would lead to little if any temporal loss of wetlands vegetation at the MWP site. Furthermore, Levine•Fricke has presented a detailed timetable for complete marsh restoration activities, a proposed monitoring program, and performance standards (Levine•Fricke 1993b). Thus, the potential mitigation measure included in Table 4.4.5.8-1 is already included in the MWP proposal. Were this information included in the impact analysis, this potential impact would not have arisen.

9. *Acidic Hypersaline Soils* (Table 4.4.5.8-1 #2)

This discussion overemphasizes the potential problem and inappropriately states that Levine•Fricke has not provided an approach to its mitigation.

Levine•Fricke has proposed intensive monitoring of the potential acid generation of the sediments that may occur during sediment offloading, placement, and settling and throughout establishment of the marsh (Levine•Fricke 1992). If isolated pockets of acidity are produced that are not attenuated by the reducing conditions reestablished by the marsh conditions (an unlikely scenario), these areas can easily be mitigated by other measures, such as the addition of limestone (not lime).

The discussion fails to consider important information produced by Professor William H. Patrick, Jr., of Louisiana State University concerning the acid generating potential of

18 sediments dredged from the Port of Oakland exposed in upland environments (Patrick 1990). Patrick (1990) concluded that acidification (pH less than 6.0) of the dredged sediments (which were exposed in an upland non-marsh environment that simulates far more extreme conditions than will ever occur in any marsh restoration project) occurred in less than 5 percent of the area. Furthermore, when the acidic "hot spots" were mixed (1 part low pH soil and 19 parts near-neutral soil) to reflect a 5 percent acid area, the resulting pH was 6.7. At the MWP site, acidification of the sediments will be further minimized by two important factors: neutralization of potential acidic "hot spots" in the mixing processes occurring during hydraulic transport of the sediment to the placement cells; and absence of sediment drying because of ponding, irrigation, and tidal action.

19 **10. Elevations**
(Table 4.4.5.8-1 #3)

The proposed high marsh elevations are based on a review of available scientific literature for vertical wetland plant distributions in the San Francisco Estuary and in particular in the Suisun Bay region (Levine•Fricke 1993b). That review compiled evidence of the optimum elevation for establishment of the desired vegetation. The data used were screened for quality control of the tidal elevation surveys. That screening caused some data to be rejected because tidal elevations were not controlled or substantiated with benchmark references or survey closure reports.

Design elevations should be a product of ecological objectives and engineering and economic feasibility. For high marsh, ecological objectives center on, but are not limited to, providing salt marsh harvest mouse habitat which requires some salt-tolerant plant species and does not require numerous small tidal channels. Existing information supports the preliminary design elevations for high marsh. High marsh also provides habitat for two sensitive plant species that do not now occur at the MWP site: soft bird's beak (*Cordylanthus mollis* ssp. *mollis*) and Suisun thistle (*Cirsium hydrophilum* ssp. *hydrophilum*).

Design elevations will be reviewed again during final design and modified as necessary to ensure that proposed elevations correspond to the best available scientific data. New field data will be collected to supplement available data sources to resolve any questions of optimum high marsh design elevations.

Consequently, we recommend that the mitigation measure for this "potential" impact be confirmation and modification of design elevations during final design, rather than adherence to another design elevation that relates to another set of ecologic, economic, and engineering constraints.

11. Decant Water Quality
(Table 4.4.5.8-1 #12)

The water in the sediment placement cells will be filtered through geotextile fabrics to remove suspended sediments before release into the return water channels and the holding ponds. Consequently, the concentrations of "contaminants" should be insignificant as indicated by leaching tests conducted by Patrick (1990) and Lee et. al. (1993; see comment #2 for more detail).

20

All water in the return water channels and holding ponds will be monitored to ensure that all chemical concentrations are below requirements for discharge by NPDES permit (i.e., the San Francisco Bay Estuary standards). In the unlikely circumstance that concentrations for any parameter are not met, concentrations could be lowered by the addition of new makeup water from the Sacramento River or by treating the water with non-toxic water treatment methods (e.g., lime, limestone, iron salts).

12. Mosquito Production
(Table 4.4.5.8-1 #16)

21

Solano County Mosquito Abatement District guidelines for mosquito source control have been incorporated into the MWP design. The MWP would decrease mosquito problems currently existing at the MWP site by eliminating breeding and larval habitat (by tidal action), and by providing improved and increased habitat for mosquito predators. The MWP design provides access to all areas where mosquito habitat might develop. To the extent that the ponds do not support vegetation, they will not be mosquito habitat, and the saline condition of the ponds will likely prevent abundant plant growth. The MWP design team includes scientists who are responsible for current guidelines for mosquito control in tidal marshlands in the region, including a pilot tidal marsh restoration project that eliminated mosquito problems on 80 acres of diked baylands in Contra Costa County. The discussion of this potential impact and its mitigation measure in the Oakland DSEIR/EIS is another example of failure to recognize that the issue has already been addressed and incorporated into the MWP design.

References

Reports

- Lee, C.R., D.L. Brandon, H.E. Tatem, J.W. Simmers, J.G. Skogerboe, R.A. Price, J.M. Brannon, M.R. Palermo, and T.E. Myers. 1993. Evaluation of Upland Disposal of Oakland Harbor, California, Sediment. Volume II: Inner and Outer Harbor Sediments. Final Report. Miscellaneous Paper EL-92-12. U.S. Army Corps of Engineers, Waterways Experiment Station, Vicksburg, MS.
- Levine•Fricke, Inc.. 1992. Technical Report, Montezuma Wetlands Project. May 1.
- _____. 1993a. Supplemental Rare Plant Surveys, Montezuma Wetlands Project. June 24.
- _____. 1993b. Draft Salt Marsh Harvest Mouse Mitigation Plan, Montezuma Wetlands Project. March 11.
- Patrick, W.H. 1990. A Field and Laboratory Investigation of Toxic Heavy Metal Release From Oakland Inner Harbor Sediments. Prepared for the Port of Oakland. May 28.
- U.S. Army Corps of Engineers San Francisco District and Port of Oakland. 1994. Draft Supplemental Environmental Impact Report/Environmental Impact Statement, Oakland Harbor Deep-Draft Navigation Improvements. March.
- U.S. Fish and Wildlife Service. 1994. Revised Draft Fish and Wildlife Coordination Act Report for the Oakland Harbor Navigation Project. Sacramento Field Office. February 14.

Letters

- Levine•Fricke. 1993c. Amphibian and Reptile Surveys, Montezuma Wetlands Project. Letter to Karen Miller, USFWS Sacramento Field Office. January 4.
- _____. 1994. Comments on Revised Draft Fish and Wildlife Coordination Act Report for the Oakland Harbor Navigation Project, February 14, 1994. Letter to Dale Pierce, USFWS Sacramento Field Office. March 30.

P & D ENVIRONMENTAL

4020 Panama Court
Oakland, CA 94611
Telephone (510) 658-6916

May 2, 1994
Letter, 0042.L13

Mr. Roger Golden-
U.S. Army Corps of Engineers
Environmental Branch
211 Main Street
San Francisco, CA 94105

SUBJECT: DOCUMENT TRANSMITTAL
Draft Environmental Impact Report/
Environmental Impact Statement for the
Oakland Harbor Deep-Draft Navigation Improvements

Dear Sir:

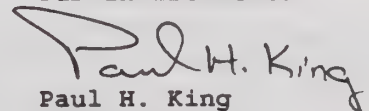
Attached you will find the following documents from concerned citizens as related to the subject report.

- 15 letters from concerned citizens affiliated with the Junior Golf Club at the Galbraith Golf Course.
- 7 letters from concerned members or representatives of the various golf clubs at the Galbraith Golf Course.
- 252 letters from concerned golfers at the Galbraith Golf Course.
- 1,939 signatures from concerned golfers who are opposed to the closing of the Galbraith Golf Course so that the facility may be used for the drying of dredged material.
- 1 letter from Brian Keefer of Desmond Muirhead, Inc. concerning the use of the Galbraith Golf Course for the drying of dredged material.
- 1 letter from the Northern California Golf Association concerning the use of the Galbraith Golf Course for the drying of dredged material.
- 1 letter from Aart C. de Vos of the Galbraith Golf Course concerning impacts associated with the use of the golf course for the drying of dredged material.

Please review these documents and incorporate these documents as part of the draft Environmental Impact Report/Environmental Impact Statement review process for the subject report. Should you have any questions, please do not hesitate to call me at (510) 658-6916.

Sincerely,

P&D Environmental


Paul H. King
Hydrogeologist

Attachments

PHK
0042.F13

P & D ENVIRONMENTAL

4020 Panama Court
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Telephone (510) 658-6916

May 2, 1994
Letter 0042.F11

Mr. Roger Golden
U.S. Army Corps of Engineers
Environmental Branch
211 Main Street
San Francisco, CA 94105

Dear Sir:

Review of the draft supplemental Environmental Impact Report/Environmental Impact Statement - Oakland Harbor Deep-Draft Navigation Improvements (EIR/S) has revealed the following areas which are deficient because they are either inadequately or inaccurately addressed, or because they simply do not appear in the document.

Issues associated with use of the Galbraith Golf Course are as follows.

- o The impact to displaced golfers has not been accurately or adequately mitigated.
- o The actual B2 alternative project duration has not been accurately identified.
- o Alternative B2 estimated project costs do not include all project elements.
- o Socioeconomic impact to golf course employees is not addressed.
- o Federally mandated evaluation of impact to low income and minority neighborhoods has not been addressed.
- o The loss to the community of a unique recreational facility has not been addressed.
- o The impact from trucking has not been accurately addressed.
- o Proper closure of the landfill located beneath the golf course has not been addressed.
- o The impact of the lateral migration of fluids in the landfill beneath the golf course has not been adequately addressed.
- o The impact from the vertical migration of liquids from the landfill beneath the golf course are not accurately addressed.
- o The threat to structures near the golf course associated with levee failure has not been addressed.
- o Information concerning the response of the fill material beneath the golf course to loading is inadequate.
- o The levee dimensions provided in the EIR/S are inadequate for evaluating impacts resulting from levee placement.
- o The site project completion elevation is inaccurate.
- o The region of influence for air quality issues is not identified for the various disposal sites evaluated.

- o The mitigation of dust impacts has not been adequately addressed.
- o The mitigation of odor impacts has not been adequately addressed.

Issues associated with the use of the Leonard Ranch are as follows:

- o Leonard Ranch cultural resources impact rating is inaccurate.
- o Threat to structures near the Leonard Ranch resulting from levee failure has not been accurately addressed.

Each of these is addressed below in detail.

GALBRAITH GOLF COURSE SITE ISSUES

Impact To Displaced Golfers Has Not Been Accurately Or Adequately Mitigated

Page 3.7-3, lines 20 through 22 of the EIR/S state that, "Galbraith Golf Course includes an 18-hole golf course, driving range, and clubhouse restaurant. A soccer field is located between the 18th fairway and Doolittle Drive. On a yearly basis, about 65,000 rounds of golf are played..."

Page 4.7-4, lines 27 and 28 of the EIR/S state that, "This option would result in the cessation of substantial portions of current on-site business and recreational activity for the duration of the interim construction phase." Page 4.7-4, line 47 and page 4.7-5, lines 1 and 2 continue that, "The temporary loss of recreational use of the golf course facility is significant, but mitigable (see section 5.3.6). The Port and the City are currently developing measures to mitigate the impacts of the temporary 7-year loss of the golf course facility to Oakland residents (see section 5.3.6)."

Page 5-16, lines 23 through 26 of the EIR/S state that, "Under an MOU between the Port and City of Oakland, the two agencies shall develop a program to mitigate the loss of golfing opportunities for Oakland senior and youth golfers during the interim 7-year period. The program will include subsidies for use of other golf courses for these groups of golfers."

Page 4.7-5, lines 6 through 8 of the EIR/S state that Three other public golf course facilities are located within a 3-mile radius of Galbraith Golf Course and would be potentially available to current Galbraith patrons during the interim construction phase." Line 17 continues, "Inquiries of staff indicate that these facilities are heavily used during the regular season."

Based upon records provided by the operators of the golf course, 69,534 rounds of golf were played at the course between the beginning of April, 1993 and the end of March, 1994. These records are summarized in Table 1, attached. For the purposes of estimation, this number of golf rounds is rounded to 70,000. Based upon discussions with the operators of the golf course, approximately 5,000 rounds are played annually by juniors and seniors.

Based upon an April, 1994 determination of membership and member residency for clubs at the golf course, it was determined that 27 percent of the members of the clubs surveyed are Oakland residents. These records are summarized in Table 2, attached. Assuming that the club memberships are representative of the population playing golf at the golf course, then 27 percent of the 20,000 annual rounds played by juniors and seniors, or approximately 5,400 rounds of golf played at the golf course on an annual basis will be eligible for subsidies at nearby golf courses as part of the mitigation proposed for displaced golfers. A total of 5,400 rounds out of approximately 70,000 rounds played annually is mitigation of approximately 8 percent of the golf played at the golf course.

1 | The EIR/S is deficient because it does not adequately mitigate the impact to displaced golfers. Subsidies only apply to juniors and seniors who are Oakland residents. The proposed mitigation in the EIR/S does not address the 50,000 rounds of golf played each year by players who are not seniors or youth, and by players who are juniors or seniors who are not Oakland residents. The EIR/S is deficient because it does not assess the impact to the golfers at the nearby sites which are identified in the EIR/S as already heavily used. The EIR/S is deficient because it does not address the impact to displaced golfers from Galbraith who will have a difficult time using already heavily used nearby golf courses.

2 | Because the socioeconomic impact is identified as significant, and because the impact has not been adequately mitigated, the value assigned to the socioeconomic impacts associated with use of the golf course as identified in Tables 6-1 and 6-2 on pages 6-6 and 6-7, respectively, should be "-3." Socioeconomic impacts are identified under the heading "land use" in Tables 6-1 and 6-2.

Actual B2 Alternative Project Duration Is Not Accurately Identified

Section 2.7.6 (beginning on page 2-35) of the EIR/S does not discuss the anticipated time required for site preparation nor the anticipated duration of dredging for use of the golf course. In a letter dated April 25, 1994 from Jodie Zaitlin at the Port of Oakland, the estimated site preparation time was identified as follows. "Based upon the preliminary design, we currently estimate that initial preparation of the Galbraith site will take 3-4 months. Some additional construction may be required after the first delivery of dredged material."

Assuming that the duration of dredging is the same as that stated for the use of the Leonard Ranch, page 2-28, line 25 of the EIR/S states that up to 9 months may be required for the placement of dredged material.

Page 5-15, lines 26 and 27 of the EIR/S state that at the golf course, "Approximately seven years would be required for sediment drying (Port 1993)."

Finally, it may be estimated that construction of a golf course will require a minimum of one year, with two years not being unusual. The time required for construction of a golf course is not provided in the EIR/S. Page 4.8-18, lines 46 and 47 of the EIR/S state that, "Topsoil will be trucked to the site after sediment is dry. Assuming 12 cy per truck, shipping 320,000 cy over 6 months, 6 days per week, and 9 hours per day..." As stated elsewhere in this commentary (see section on Trucking Impact), four to five times the volume of soil will need to be trucked to the site to cover the dredged material for golf course construction, resulting in a possible four to five-fold increase in the time necessary for the topsoil to be brought to the facility and an additional 2 to 2.5 years for golf course construction.

Page 4.7-5, lines 1 and 2 state that, "The Port and the City are currently developing measures to mitigate the impacts of the temporary 7-year loss of the golf course facility to Oakland residents (see section 5.3.6)."

Page 11-1, lines 36 and 37 state that, "Use of the Galbraith site for sediment disposal would preclude use of the existing golf course on this site for up to 7 years."

3 | When the estimated 7 year project duration identified in the EIR/S is evaluated, the actual project duration can more accurately be estimated to be a minimum of 9 years (4 months to prepare the site, 9 months for the dredging, 7 years to dry the dredged material, and 1 year to build a golf course). This assumes that the dredged material can be dried in the seven year time period

identified by the Port and that one foot of topsoil will be sufficient to cover the dredged material and still allow construction of a golf course, and that the golf course can be built in one year. As discussed in the section on Trucking Impact in this commentary, an additional 2 to 2.5 years will be required for importation of topsoil in addition to the 9 years identified above, resulting in a potential minimum project duration of 11 to 11.5 years or more.

The EIR/S is deficient because it does not identify the estimated time for site preparation or dredged material placement. The EIR/S is deficient because it does not discuss the duration of the construction of a golf course following completion of sediment drying. The EIR/S is deficient because it underrepresents the duration for which the community will be deprived of a golf course.

Alternative B2 Estimated Project Costs Do Not Include All Project Elements

Page 7-4 summarizes project costs for the different projects. Alternative B2, which is the alternative of choice identified in the EIR/S and which includes the use of the Galbraith golf course as a disposal site does not include the cost of construction of a new golf course at the end of the project. Assuming that the minimum cost for construction of a golf course is \$10 million, the project cost for alternative B2 is at a minimum, \$153.4 million.

Page 2-35, lines 36 through 38 state that, "A portion of the existing golf course would be cleared of all structures, utilities, landscaping, etc. The surface drainage channel that currently runs down the center of the site would be redirected to the perimeter of the site. Dikes would then be constructed around the cleared portion of the golf course..." Page 2-40, lines 19 and 20 continue to state that, "Approximately 228,000 cy of material would be needed for construction of the dike."

Page 4.2-51, lines 18 through 22 state that, "The RWQCB has requested installation of a containment system (e.g. slurry/cutoff wall) at Galbraith (RWQCB 1993) to attenuate lateral migration of fluids. The design of such a system is currently undergoing study and review by the Port and the RWQCB. Design of these features will follow landfill design standards prescribed in Article 23, Chapter 15 California Code of Regulations as required by the RWQCB."

On April 18, 1994 P&D Environmental personnel met with Mr. Harari of the Army Corps of Engineers to discuss costs associated with the implementation of alternative B2. During this meeting, Mr. Harari stated that details associated with site preparation costs were to be obtained from the Port. In addition, Mr. Harari stated that the cost for the construction of a golf course following completion of the drying of the dredged material was not included in the cost provided in the EIR/S for alternative B2.

A Site Preparation Cost Estimate transmitted by facsimile from the Port of Oakland to P&D Environmental on April 28, 1994 identified site preparation costs as follows.

Dike Foundation Preparation	\$ 447,000
Dike Construction	2,472,000
Landscaping/Erosion Control	70,000
Spillway/Weir Construction	77,000
Fencing	247,000
 Preliminary Construction Cost Estimate:	 3,313,000
Engineering Design and Overhead:	828,000
 Total Preliminary Cost Estimate:	 \$4,141,000

- 4 It is unclear if these costs include a slurry wall requested by the RWQCB. However, it may be assumed that at an approximate cost of \$10/cy to load, haul and place the 228,000 cy of soil for the dikes, that the slurry wall cost is not included.

The EIR/S is deficient because it does not accurately represent the actual costs associated with alternative B2.

Socioeconomic Impact to Golf Course Employees Is Not Addressed

- 5 In discussing the socioeconomic environment, page 3.7-3, lines 24 through 26 of the EIR/S state that, "The golf course employs 25 full-time and part-time people during the regular season, with an additional 5 full-time and part-time employees hired in the summer months."

Page 4.7-4, lines 41 through 43 state that, "If this disposal option is implemented, employment from the golf course operations would be eliminated during the dredged material disposal and drying phase, and gross sales would be reduced." Although the loss of jobs is mentioned, no discussion of the impact associated with the lost jobs is provided in Section 4 of the EIR/S (see pages 4.7-4 and 4.7-5).

Pages 5-14 through 5-16 of the EIR/S do not discuss mitigation of the lost jobs. The EIR/S is deficient because the impact of lost jobs to golf course employees is not addressed and mitigation of this impact is not addressed.

Federally Mandated Evaluation of Impact To Low Income And Minority Neighborhoods Has Not Been Addressed

- 6 In February, 1994 President Clinton issued Executive Order 12898 to all Federal agencies directing them to evaluate if any of their projects will have an adverse impact on low income or minority neighborhoods. The EIR/S has not evaluated if the use of the golf course as a disposal facility for dredged material from the Oakland harbor will adversely impact low income or minority neighborhoods in the vicinity of the golf course. The EIR/S is deficient because Executive Order 12898 has not been addressed.

Loss Of A Unique Community Recreational Facility Has Not Been Addressed

- 7 The golf course has been described as a unique facility in the United States because of the relaxed social atmosphere which allows cross-cultural and cross-generational relationships to be united by a common interest. It has taken many years to develop, cultivate and nurture this social atmosphere. Many of the people who come together at the golf course to play golf are from very diverse backgrounds, and do not have an opportunity to come together under any other conditions in their normal lives. The facility allows community youth to interact with community elders, and provides a place for our community's youth to have role models. These are elements which are absolutely vital to the healthy functioning of a society and a community. The social atmosphere at the Galbraith golf course is unique for this reason, and is not duplicated at any of the other golf courses in the East Bay.

The EIR/S is deficient because this loss to the community of not just a recreational facility, but of a facility which fosters societal wellness has not been addressed.

Impact Resulting From Trucking Has Not Been Accurately Addressed

There are many businesses in the vicinity of the golf course which rely on trucking for the normal and safe functioning of their operations. In addition, there is traffic associated with the use of Oakland International Airport.

Airport Drive is the only road to enter and exit the airport. Page 3.8-31, lines 19 and 20 state that, "Airport traffic dominates the circulation patterns immediately north of the project site."

Page 3.8-31, lines 25 through 27 state that, "The movement of the dredge spoils to this site would not affect the ground transportation...since the spoils would be transported through a pipeline; therefore, an extensive analysis of the existing transportation network in the project vicinity is not necessary."

Page 4.8-18, lines 30 and 31 state that, "...there would be truck traffic generated by the transport of the levee material to the site. Approximately 228,000 cy of levee material would need to be imported to the Galbraith site." Lines 39 and 40 continue, "Assuming a hauling period of 4 months, 6 days per week, 9 hours per day, approximately 185 round trips per day or about 20 round trips per hour would be required to transport 228,000 cy of material to the site."

Page 4.8-18, lines 46 and 47 and page 4.8-19, line 1 continue, "Topsoil will be trucked to the site after sediment is dry. Assuming 12 cy per truck, shipping 320,000 cy over 6 months, 6 days per week, and 9 hours per day, approximately 171 round trips per day or about 19 round trips per hour would be generated."

Page 4.8-19, lines 7 and 8 conclude that, "No significant roadway impacts from the proposed alternative, as discussed are anticipated; therefore, no mitigation measures are required."

Page 4.8-1, lines 5 through 8 state that, "The threshold of significance used for land transportation impacts is generally the level of additional traffic that would be perceptible by the motoring public. While there is no absolute standard for this level, a change (increase) in the ratio of traffic volume to highway capacity (V/C) greater than 3 percent (0.03) was used to define a significant impact."

The EIR/S uses the criteria of a 3 percent increase in vehicular traffic to determine if a significant impact will occur for traffic. However, no study was performed for traffic in the vicinity of the golf course, and it is therefore not known if the proposed use of the golf course will result in a significant impact to traffic. Nonetheless, the EIR/S states that no significant impact to traffic will occur. The EIR/S is deficient because the conclusion of no significant impact is not based upon the criteria set forth in the EIR/S for determination of a significant impact to traffic.

Trucking associated with the golf course is identified in the EIR as being for the construction of the dikes to surround the facility (228,000 cy), and with the importation of soil to cover the dredged material after the dredged material has been dried (320,000). The volumes identified in the EIR/S for the cover material for the dry dredged material will cover the dry dredged material to a depth of approximately one foot.

Although the volume of soil identified in the EIR/S would cover the golf course to a thickness of approximately one foot, Mr. Cleve Williams, director of Parks and Recreation for the City of Oakland has quoted a golf course architect contacted by the Port of Oakland (Robert Trent Jones, II of Palo Alto, California) as stating that approximately 4 to 5 feet of cover material would need to be trucked into the site. Under these circumstances, there would be 4 to 5 times as much trucking to cover the facility as is indicated in the EIR/S.

The combined volume of soil for the dikes and cover identified in the EIR/S is approximately 550,000 cy, or approximately one half of the volume of soil which will be trucked from the Leonard Ranch to the Redwood Landfill in Novato.

- 8 | The increase in cover material required to cover the dredged material to a depth of 4 to 5 feet would increase the volume of soil trucked to the Galbraith site to an equal or greater amount than would be trucked from the Leonard Ranch to the Redwood Landfill.

The EIR/S is deficient because it does not provide an explanation for the performing of traffic studies the Leonard Ranch and the Port sites.

Proper Closure Of The Landfill Beneath The Golf Course Has Not Been Addressed

Page 2-65, lines 21 through 25 state that, "The Port is the lead agency under CEQA. Responsible agencies (public agencies other than the lead agency that have responsibility for carrying out or approving a project) include California Coastal Commission, State Lands Commission, San Francisco Bay Conservation and Development Commission, Regional Water Quality Control Board, Bay Area Air Quality Control Management District, and the City of Oakland.

- 9 | The golf course is built on top of an old landfill. The California Integrated Waste Management Board (IWMB) is responsible for ensuring that landfills are properly permitted and properly closed. The IWMB is not mentioned in the EIR/S. The EIR/S is deficient because permitting associated with the IWMB and the addressing of IWMB closure requirements are not present in the EIR/S.

Impact Of Lateral Migration Of Fluids From Landfill Not Adequately Addressed

Page 3.2-39, line 32 of the EIR/S states that, "Petroleum hydrocarbons have been found in groundwater in the southern portion of the site." Lines 44 and 45 continue, "The lateral extent of petroleum hydrocarbons in shallow groundwater in this area has not been fully delineated."

Page 3.2-41, lines 10 through 12 of the EIR/S state that, "Relatively high concentrations (i.e. above the federal or state Maximum Contaminant Levels [MCLs] of constituents including barium, chloride, nitrate, and trichloroethylene (TCE) were detected in some on-site wells."

Page 3.2-41, line 28 of the EIR/S states that, "The Galbraith Golf Course was constructed in 1965 on a capped landfill site."

- 10 | Page 4.2-61, lines 39 through 41 of the EIR/S state that, "Due to loading by dredged sediments on the former landfill materials, lateral spreading and migration of existing leachate fluids is expected. This impact is considered significant, especially in areas where petroleum products have been observed, but of limited lateral extent." This same idea of lateral spreading and migration is discussed on page 4.2-51, lines 10 through 16. However, the "limited lateral extent" of impact identified in the EIR/S is not identified, and no rationale is provided as to why the extent of migration would be considered "limited in extent." For this reason, the EIR/S is deficient in identifying and evaluating the impacts associated with lateral migration of contaminated liquids from the landfill.

Page 4.2-51, lines 18 through 22 of the EIR/S state that, "The RWQCB has requested installation of a containment system (e.g. slurry/cutoff wall) at Galbraith (RWQCB 1993) to attenuate lateral migration of fluids. The design of such a system is currently undergoing study and review by the Port and the RWQCB. Design of these features will follow landfill design standards prescribed in Article 23, Chapter 15 California Code of Regulations as required by the RWQCB."

Although the EIR/S states that a plan for containment of the migration of subsurface fluids from the landfill will be submitted to the Regional Water Quality Control Board for review, the EIR/S is deficient in that it does not

provide a plan for containment of the fluids which can undergo public scrutiny for adequacy. 10

Impact From Vertical Migration Of Liquids From Landfill Not Accurately Addressed

Page 3.2-35, lines 39 through 41 of the EIR/S state that, "Comparison of water levels in paired wells screened in bay mud and alluvium (Wells G311 and G31m; G31n and G31o) indicate that the vertical flow between the units are relatively insignificant..."

Page 4.2-51, lines 7 and 8 of the EIR/S state that, The possible impact of vertical migration of fluids is not considered significant."

Plate 7 of the Subsurface Consultants, Inc. 1992 geotechnical report for the golf course identifies the eastern 1/3 of the golf course as not being underlain by bay mud. The area not underlain by mud is identified to be underlain by native soils. In addition, page 7 of the Subsurface Consultants, Inc. report identifies native soils as containing layers of silty sand and gravel, particularly along the alignment of ancient drainage courses.

The EIR/S is deficient because it does not accurately identify the potential for vertical migration of fluids from the landfill associated with the permeable soil layers identified on the eastern 1/3 of the site in the 1992 Subsurface Consultants, Inc. geotechnical report. The EIR/S is also deficient because it does not show the locations of the wells identified as being screened in bay mud and alluvium, as referenced above. 11

Threat To Structures Near The Golf Course Resulting From Levee Failure Has Not Been Addressed

Page 3.3-16, lines 20-23, of the EIR/S state that "A layer of bay mud deposits (...approximately 2 to 10 feet thick) and underlying alluvium...are beneath the fill material and throughout most of the site..."

This statement is misleading in that it implies that bay mud is present underneath the entire site. Review of the report titled, "Preliminary Geotechnical Engineering Investigation - Galbraith Dredge Disposal Site" prepared by Subsurface Consultants, Inc. (SCI) dated May 23, 1991 shows that bay mud is not present under approximately the eastern 1/3 of the site. 12

Page 3.3-16, line 28 of the EIR/S states that, "The potential for settlement and liquefaction may be considered moderate." 13

This statement understates the potential impacts resulting from a seismic event and contradicts other descriptions associated with potential for settlement and liquefaction at the golf course (see reference to page 4.3-11, lines 29-34 of the EIR/S, below).

Page 4.3-11, lines 22-26 of the EIR/S state, "Potentially significant seismic impacts may occur at the Galbraith Golf Course site, if a large magnitude earthquake occurred...severe ground motion and liquefaction could occur. ...[E]arthquake-induced levee failure at the site could cause geologic hazards on surrounding features such as Doolittle Drive, the interior drainage canal, and the San Leandro Wastewater Treatment Plant."

The EIR/S is deficient because the offsite structures which could be impacted which are not identified include Airport Road (the only access to Oakland International Airport); FAA landing lights located at the site; and an East Bay Municipal Water District reclaimed water pipeline. These additional features are identified on page 5 (lines 2 through 5) of the SCI 1992 report.

13

Page 4.3-11. lines 29-34 of the EIR/S go on to state that, "If a large magnitude...earthquake occurred...the disposal site could potentially have severe ground motion and liquefaction. ...[T]he impacts...are considered minimal, because at the time of the site placement and/or drying the site would be unpopulated. Exterior levees will be constructed at a sufficient distance from surrounding improvements so that in the event that a failure occurs resulting from an earthquake, they will not be affected." Lines 36 and 37 conclude that, "...the impacts are considered insignificant."

The EIR/S is deficient in identifying impacts to offsite structures because the site being unpopulated does not address the impact to the identified offsite structures. In addition, the EIR/S is deficient because the distance of the levees which will be considered "sufficient" from the structures identified as being potentially impacted in the EIR/S, particularly the San Leandro Wastewater Treatment Plant, is not addressed.

The proposed use of the Galbraith golf course will surround the San Leandro waste water treatment facility on two sides with levees. Failure of the levees could result in the loss of the use of the treatment facility to the community. The EIR/S is inadequate because the potential impact resulting from levee failure is identified as insignificant. Similarly, the EIR/S does not identify Airport Road, the only road into or out of Oakland International Airport, as a structure which could be impacted, and does not therefore discuss the significance of this structure being impacted.

Page 4.3-12, line 1 of the EIR/S states that "Settlement of the bay mud beneath the site is anticipated." Lines 6 and 7 go on to state that "A geotechnical analysis has predicted that only 0.5 inch of settlement will occur at 40 feet from the dike; therefore neither the road or gray water line will be significantly impacted." Lines 9 and 10 conclude that, "Off-site settlement impacts are therefore not considered significant."

Lines 23 and 24 conclude that, "...levees should be designed using standard geotechnical engineering practices to prevent catastrophic impacts on adjacent facilities in the event of failure." The EIR/S is deficient because catastrophic impacts are identified as being possible, yet are not identified as significant because the site will be "unpopulated."

Information Concerning The Response Of Fill Material To Loading Is Inadequate

Review of the geotechnical analysis referenced on lines 6 and 7 of the EIR/S (a letter from Jodie Zaitlin at the Port addressed to P&D Environmental dated April 25, 1994 identified this geotechnical analysis as that found in the 1992 SCI report) identifies the site subsurface conditions. On page 5, lines 10 and 11, the SCE report states that, "In general, subsurface conditions at the site consist of fill overlying bay deposits and firm natural soils." A description of the fill materials includes cover fill, garbage fill, debris fill and hydraulic fill on pages 5 and 6 of the SCI report.

Page 13, lines 4 and 5 of the SCI report identify "minimum acceptable factors of safety of 1.2 during construction and 1.5 for long term conditions are appropriate." Lines 19 through 24 state that "...horizontal ground accelerations on the order of 0.25g could be generated at the site during major seismic events... (T)he pseudostatistic factors of safety are less than 1.0 for seismic coefficients greater than 0.1g to 0.2g." Page 14, lines 2 through 6, continues that, "...we conclude that the analysis suggest that during a moderate to strong earthquake, the dikes will likely experience some permanent deformation. The magnitude of lateral dike movement will vary but may be on the order of several feet."

Line 9 continues, "Liquefaction may also occur within the existing hydraulic fill..." Lines 12 through 17 continue that, "Insufficient data currently exists regarding the distribution and characteristics of the hydraulic fill to develop preliminary conclusions regarding its impact on seismic stability. Detailed liquefaction studies were beyond the scope of this study but should be analyzed in detail during future investigations."

Page 15, lines 2 and 3 of the SCI report state that, "...a detailed geotechnical investigation should be conducted." Lines 7 and 8 conclude that, "Classification, consolidation, and shear strength tests should be conducted on representative samples of each significant soil type."

Plate 12 of the SCI report shows that the East Bay Municipal Utilities District (EBMUD) gray water line will be within an area of failure should the levee slopes fail. The SCI seismic stability analysis shows that during a moderate to strong seismic event, dike deformation is anticipated. The report indicates that although settlement might not affect the EBMUD pipe, seismically induced slope instability could.

The EIR/S is deficient because it is not known how the hydraulic fill will respond during a seismic event, yet the impacts are identified as insignificant (page 4.3-11, lines 29 through 34 and lines 36 and 37 of the EIR/S). 14

Levee Dimensions Provided In The EIR/S Are Inadequate For Evaluating Impacts Resulting From Levee Placement

Although levee width is not stated for the Galbraith golf course in the EIR/S, the 1992 Subsurface Consultants, Inc. report identifies a slope of 2:1 (p13, line 6) and maximum crest elevation of 28 feet as specifications for levee construction. Assuming a 2:1 slope, a levee 20 feet high would be 40 foot wide on each side of the crest, plus the crest width of 10 to 15 feet, resulting in a levee width of approximately 90 to 95 feet from toe to toe. Based upon the scale provided in Figure 2.7.6-1, the depicted levee width in Figure 2.7.6-1 is 40 feet. 15

It is unclear from review of the cross-section shown on Fig. 2.7.6-1 of the EIR/S what the change in elevation from the toe to the crest of the levee are along Airport Drive for the proposed levee. Review of a topographic map prepared by the Port dated 12/5/91, titled "Potential Wetland Plant Communities of the Lew Galbraith Golf Course" shows an elevation on the golf course of approximately 5 feet at a distance of approximately 50 feet from Airport Drive. The golf course elevation is approximately 12 or 13 feet at a distance of approximately 125 to 145 feet from Airport Drive. The portion of the golf course located between 50 feet and approximately 145 feet from Airport Drive is the approximate location of one of the proposed levees. A crest elevation of 34 feet, as identified on Figure 2.7.6-1, would generate a difference in height from levee toe to crest of 29 feet. The levee cross sections provided in Figure 2.7.6-1 appear to show a slope of 3:1 on the front (levee exterior) and a slope of 2:1 on the back (levee interior). A levee 28 feet in height, as measured from the toe on the Doolittle Road side, would have a width of approximately 150 feet. The dikes shown on Figure 2.7.6-1 measure only approximately 40 feet in width.

Figure 2.7.6-1 on page 2-37 of the EIR/S shows the approximate dike location placement at the Galbraith golf course. The EIR/S is deficient because it does not identify approximate dike widths for visual evaluation of levee impact to offsite structures. Similarly, the cross sections shown on Figure 2.7.6-1 do not show accurate dike widths.

Site Project Completion Elevation Is Inaccurate

16 One of the levee cross sections on figure 2.7.6-1 on page 2-37 shows a final elevation for dried material of 18 feet, with a starting base elevation of 13 feet. This implies a final dried thickness of 5 feet of dredged material. Assuming 117 acres available (which does not seem likely based upon the needed levee widths, as discussed above) the final thickness of 1.3 mcy is approximately 8 feet. Page 4.2-62, lines 10 and 11 of the EIR/S state that, "Once the material is dried, spread and the containment levees removed, the site will be about 2 to 4 feet above existing grade." There has been no discussion of removal of the containment levees from the site in the EIR/S, implying that the levees will need to be distributed at the site.

Page 4.8-18 of the EIR/S, lines 46 and 47 state that 320,000 cubic yards of soil will be brought to the site to cover the dried dredge materials. This is a calculated thickness of approximately 1 foot over the drying area. This one additional foot will provide a project completion elevation of approximately 9 feet above present grade. However, based upon a statement by Mr. Cleve Williams which was referenced earlier in this commentary, approximately 4 to 5 feet of soil will be needed to cover the dredge material for golf course construction, resulting in a final project completion elevation of approximately 12 to 13 feet above grade. The EIR/S is deficient for not accurately assessing the impact of the volume of soil or accurately identifying the project completion elevation.

Region Of Influence For Air Quality Issues Is Not Identified For The Various Disposal Sites Evaluated

17 The EIR/S identifies various air emissions of concern resulting from the use of the various disposal sites. The EIR/S further states that the impact of emissions to the most sensitive members of the population is a special concern (page 3.1-14, line 15 of the EIR/S). However, the EIR/S has not identified the Region of Influence (ROI) for air emissions for the various disposal facilities. It is not possible to determine which receptors will and will not be impacted by air emissions from the use of the golf course without identification of the ROI. The EIR/S is deficient because it has not identified the ROI for the use of the golf course.

Mitigation of Dust Impacts Has Not Been Adequately Addressed

18 Page 4.1-16, lines 26 through 30 of the EIR/S state that, "Due to the relatively large size (surface area) of the site, the amount of soil that would be moved around to construct the containment levees and interior dikes, and the amount of exposed soil, there is potential for significant dust generation. Incorporation of appropriate mitigation measures, such as regularly applying a soil binding agent such as water during construction to dry exposed soil, should reduce this impact to insignificance."

The objective of the use of the golf course is to dry the dredged material. The EIR/S is deficient because it does not address how the dredged material will be dried if it is being wetted to abate dust.

Mitigation Of Odor Impacts Has Not Been Adequately Addressed

19 Page 4.1-16, lines 37 through 45 of the EIR/S states, in part, that odors are not expected to be a problem because there have not been odor complaints associated with past dredging projects. The absence of records of complaints does not necessarily indicate that odors were not present.

The EIR/S goes on to state that if odors are encountered, "...the contractor will implement appropriate odor control measures to control odor..." The EIR/S, is deficient because it does not identify what those odor control

measures are. In the absence of specific methods identified for odor abatement, the EIR/S is deficient in addressing potential odor problems.

19

LEONARD RANCH SITE ISSUES

Leonard Ranch Cultural Resources Impact Rating Is Inaccurate

Page 3.5-5, lines 16 through 19 state that, "A cultural resources record search conducted by personnel at the California Archaeological Inventory, Northwest Information Center, indicated that there are no recorded archaeological sites within the Leonard Ranch site boundary. However, the Leonard Ranch site has not been surveyed for cultural resources."

Page 4.5-2, lines 35 through 37 state that, "Because the area is considered sensitive due to the location of sites in the vicinity, there is a potential that unknown cultural resources could be impacted. Impacts are considered potentially significant."

Page 6-9, lines 23 through 26 state that, "For cultural resources, alternatives using the Montezuma Wetlands site potentially would have significant but mitigable impacts (a "2"); all other alternatives would have essentially no impact, except the alternatives involving Leonard Ranch where the potential for cultural resources to be present is speculative."

The discussion of the cultural resources Leonard Ranch setting (Section 3) is deficient because it is not consistent with the identification of the site vicinity as being considered "sensitive," as identified on page 4.5-2, line 35. The EIR/S is deficient because the assignment of a value of "-1" is inappropriate, based on the speculative nature of the value assignment. The value entered for the Leonard Ranch for "cultural resources" on Tables 6-1 and 6-2 on pages 6-6 and 6-7, respectively, should be "0."

20

Threat to Structures Near the Leonard Ranch Resulting From Levee Failure Has Not Been Accurately Addressed

Page 4.3-9, lines 20-23 of the EIR/S state, "Potentially significant seismic impacts may occur at the Leonard Ranch site, if a large magnitude earthquake occurred...severe ground motion and liquefaction could occur. ...[E]arthquake-induced levee failure at the site could cause geologic hazards on SR 37 and the adjacent railroad tracks." Lines 28-31 go on to state that, "If a large magnitude...earthquake occurred...the sediment rehandling site could potentially have severe ground motion and liquefaction. This could cause a number of problems for the levees, which will be constructed on unconsolidated on-site soil and sediments. The physical impacts of these geologic hazards on SR 37 and the adjacent railroad tracks could be significant."

The potential seismic impacts identified with the use of the Leonard Ranch are not consistent with the impacts identified with the immediately adjacent Sonoma Baylands. Page 4.3-10, lines 19-22 of the EIR/S state "...potential seismic impacts at the site are considered minimal... Placement of the levee 100 feet from the railroad tracks will eliminate any potentially significant impact from earthquake-induced failure of the levee."

21

The EIR/S is deficient because it did not address the placement of the levee 100 feet from the railroad tracks or from SR 37 as an option at the Leonard Ranch. Furthermore, the EIR/S is deficient because it does not state the distance from the railroad tracks or SR 37 to the levees at the Leonard Ranch. The EIR/S is inadequate because it does not provide a rationale for the inconsistency in the identified seismic impacts for the Leonard Ranch and the Sonoma Wetland sites. In addition, the EIR/S is inadequate because it does not identify the elevations of SR 37 and the railroad relative to the Leonard Ranch.

May 2, 1994
Letter 0042.F11

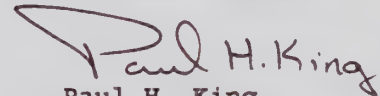
13

CONCLUSION

For these reasons, the EIR/S does not accurately or adequately assesses the impact of the Port's 42 foot project to the community or the environment. It is requested that the Port and Army Corps re-assess the accuracy and adequacy of the EIR/S for it's impact to the community and the environment and then re-evaluate the conclusions of the EIR/S for the appropriateness of the Lew F. Galbraith Golf Course as a disposal site for dredging spoils from the Port's 42 foot project.

Sincerely,

P&D Environmental


Paul H. King
Hydrogeologist

Attachments: Tables 1 & 2

PHK
0042.F11

TABLE 1

	LEW F. GALBRAITH GOLF COURSE MONTHLY ROUNDS 1982 - 1994												
YEARS	JULY	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	TOTAL
1982-1983	6,766	7,095	6,070	6,121	4,332	4,498	4,323	4,241	4,190	6,258	6,979	6,584	67,457
1983-1984	5,723	6,177	5,361	4,894	4,341	3,759	5,209	5,063	5,826	5,727	5,800	5,534	63,414
1984-1985	6,063	5,917	4,747	4,202	3,187	3,338	3,901	4,332	4,196	5,157	5,529	5,868	56,437
1985-1986	5,680	5,902	5,070	4,654	3,720	3,592	3,760	3,202	4,582	5,295	6,037	6,288	57,782
1986-1987	5,795	6,048	4,811	4,780	4,714	3,430	3,526	4,259	4,426	5,834	5,661	5,780	59,064
1987-1988	6,196	6,201	5,518	4,995	4,346	2,725	3,919	5,591	5,874	5,341	5,475	5,934	62,115
1988-1989	5,960	6,111	5,077	4,817	3,998	3,392	4,163	3,944	4,331	5,658	5,144	5,120	57,715
1989-1990	5,578	5,803	4,954	4,102	4,696	4,565	4,241	4,486	5,626	6,070	5,631	6,655	62,407
1990-1991	6,343	6,467	6,671	5,808	5,207	4,316	4,623	4,714	3,409	5,297	4,968	5,080	62,903
1991-1992	5,342	6,045	5,328	4,563	4,869	3,978	4,815	4,281	4,907	6,144	5,935	5,963	62,170
1992-1993	6,890	6,687	6,220	5,469	5,219	3,678	3,424	4,011	5,627	6,217	6,055	6,260	65,757
1993-1994	6,956	7,235	6,132	6,039	5,267	4,479	4,772	4,175	5,947				

TABLE 2

CLUBS AT LEW F. GALBRAITH GOLF COURSE

CLUB NAME	TOTAL MEMBERSHIP	MEMBERS WHO ARE OAKLAND RESIDENTS	% OF CLUB WHO ARE OAKLAND RESIDENTS
LEW F. GALBRAITH LADIES CLUB	27	5	19%
LEW F. GALBRAITH MENS CLUB	104	37	36%
LEW F. GALBRAITH JR. GOLF PROGRAM	25	19	76%
SENIORS IN RETIREMENT (SIRS)	115	11	10%
EAST BAY SENIORS	70	19	27%
THE SWINGING SAMURAI	52	9	17%
NAGASE GROUP	45	20	44%
	-----	-----	
TOTAL _	438	120	

DREDGING IS NECESSARY, HOWEVER DISPOSAL OF MUD AT THE LEW F. GALBRAITH GOLF COURSE WILL LEAD TO THE FOLLOWING PROBLEMS IF THE COURSE IS CLOSED.

SOME MEMBERS OF THE JUNIOR GOLF PROGRAM WONT BE COMPENSATED AND NOT ABLE TO PLAY BECAUSE THEY ARE NOT OAKLAND RESIDENTS.

1

THERE IS NO RECREATION FOR THE OAKLAND CHILDREN TO LEARN AND PLAY GOLF. THE OTHER GOLF COURSES ARE ALREADY HAVE AN OVERFLOW OF PLAYERS.

JUNIORS NOT ABLE TO CARRY THEIR BAGS AND PLAY NINE HOLES OF GOLF WITHOUT SUPERVISION ARE NOT ALLOW ON THE COURSES.

MOST OF OUR JUNIOR'S ARE LITTLE CHILDREN AGE RANGE BETWEEN THE AGE OF 6-13 YEARS OF AGE.

2

THEY ARE NOT ALLOWED TO RIDE THE GOLF CARTS , BECAUSE IT IS THE LAW FOR INSURANCES POLICIES. CHABOT GOLF COURSES ARE TO HILLY AND THERE IS ALSO AN OVERFLOW .

ALAMEDA GOLF COURSE PAR 3 WHERE JUNIORS COULD LEARN THERE, DON'T WANT THE JUNIORS THERE BECAUSE THEY SAY WE HOLD UP THE COURSE. THE THOUGHT THAT COME TO ME IS THAT, DID THEY HOT HAVE TO LEARN TOO AT SOME TIME BEFORE THEY BECAME GOLFERS?.

RECREATION IN THE FLATLANDS OF OAKLAND COMMUNITY ARE VERY LIMITED, SUCH AS GOLFING, SWIMMING, SOCCOR , BOWLING AND OTHERS SPORTS WITHOUT GOING OUT SIDE OF THE COMMUNITY .

CRIMES, DRUGS AND VIOLENCES ARE ON THE STREETS EVERY WHERE THIS IS WHY WE ARE BEING UGHTED LIKE CATTLE THAT TAKE OUR YOUTH BEFORE THEY CAN BECOME ADULTS AND BE OF SOME USES TO THE COMMUNITY.

FOR THIS REASON I FEEL THAT THE (E.I.R.) DOES NOT REPRESENT THE TRUE IMPACT TO THE OAKLAND COMMUNITY AND IT CITIZENS.

WE ALWAYS HEAR THE SOLGAN (HELP THE CHILDREN) (HELP THE CHILDREN) ARE WE THEY NOT VALUED AS MUCH AS (MUD) ?
SO PLEASE TAKE YOUR MUD SOME PLACE OTHER THAN LEW F. GALBRAITH GOLF COURSE.

THANK YOU FOR ALLOWING ME TO SPEAK AND IF I CAN BE OF ANY ASSISTANCES TO YOU, PLEASE DON'T HESITATE TO GIVE ME A CALL.

RESPECTFULLY YOURS,

REOLA LOUISE FREEMAN

THE JUNIOR GOLF PROGRAM (CHAIRPERSON)

April 1994

LEW GALBRAITH WOMEN'S GOLF CLUB

OAKLAND, CALIFORNIA



Mr. Roger Golden
Corps of Engineers
Environmental Branch
211 Main Street
San Francisco, Ca. 94105

Dear Mr. Golden:

- 1 | It has been brought to our attention that you have prepared a draft Environmental Impact Report (EIR) which has identified the Lew F. Galbraith Golf Course as the preferable location for the disposal of dredge materials for the Port of Oakland 42's foot project. It is also our understanding that the draft EIR concludes that there will be no adverse impact to the community because subsidies will be provided for seniors and juniors at other golf course in the vicinity to mitigate the loss of access to the Lew F. Galbraith Golf Course. Furthermore, it is my understanding that subsidies will apply only to the "residents" of Oakland.

Our club has 27 members. Only 5 members or 19% of our club are Oakland residents and will be eligible for subsidies. The subsidies are identified as the method of mitigating the impact of golfers.

Our statistics show that the EIR grossly underestimates the impact to the golfing community.

Your very truly,

Barbara Oliver
President
LEW F. GALBRAITH WOMEN'S GOLF CLUB

LEW GALBRAITH WOMEN'S GOLF CLUB

OAKLAND, CALIFORNIA



April 14, 1994

Corps of Engineers
Environmental Branch
211 Main Street
San Francisco, Ca. 94105

Gentlemen:

It is our understanding that the Draft EIR concludes there will be no adverse impact for Seniors playing at Galbraith Golf Course.

Our club has only 20% of our members who resides in Oakland with the balance from surrounding East Bay Cities.

Where will the majority of the members play after Galbraith's closure?

Yours Very Truly,

Barbara Oliver
President
LEW GALBRAITH WOMEN'S GOLF CLUB

CLUB MEMBERS BY CITIES

OAKLAND	5
ALAMEDA	7
BERKELEY	1
HAYWARD	2
CASTRO VALLEY	3
SAN LEANDRO	4
SAN LORENZO	1
SAN FRANCISCO	4
Total Members	27

NAGASE GOLF GROUP
827 BROADWAY SUITE 300
OAKLAND, CALIFORNIA 94607
(510) 763-7475

MAY 1994

Mr. Roger Golden
Corps of Engineers
Environmental Branch
211 Main Street
San Francisco, Ca. 94105

Dear Mr. Golden:

It has been brought to our attention that you have prepared a draft Environmental Impact Report(EIR) which has identified the Lew F. Galbraith Golf Course as the preferable location for the disposal of dredge materials for the Port of Oakland 42's foot project. It is also our understanding that the draft EIR concludes that there will be no adverse impact to the community because subsidies will be provided for seniors and juniors at other golf courses in the vicinity to mitigate the loss of access to the Lew F. Galbriath Golf Course. Furthermore, it is my understanding that subsidies will apply only to the "residents" of Oakland.

Our club has 45 members 20 of which are Oakland residents and will be eligible for subsidies. The subsidies are identified as the method of mitigation the impact of golfers.

Our statistics show that the EIR grossly underestimates the impact to the golf community.

We have been playing golf twice a month at Galbraith for the past 20 years. Where will we play after Galbraith closes?

Sincerely,



H.Tats Nagase
for The Nagase Golf Group

Lew F. Galbraith Men's Golf Club
10505 Doolittle Drive
Oakland, California 94603

MAY 1994

Mr. Roger Golden
Corps of Engineers
Environmental Branch
211 Main Street
San Francisco, Ca. 94105

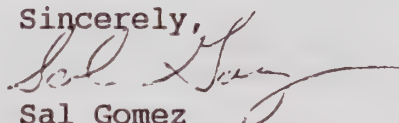
Dear Mr. Golden:

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Our clubs has 104 members.37 of our members or 36% of our club are Oakland residents and will be eligible for subsidies. The subsidies are identified as the method of mitigation the impact of golfers.

Our statistics show that the EIR grossly underestimates the impact to the golf community.

Sincerely,



Sal Gomez
President

SENIORS IN RETIREMENT (S.I.R.S.)
10505 DOOLITTLE DRIVE
OAKLAND, CALIFORNIA 94603

MAY 1994

Mr. Roger Golden
Corps of Engineers
Environmental Branch
211 Main Street
San Francisco, Ca. 94105

Dear Mr. Golden,

It has been brought to our attention that you have prepared a draft Environmental Impact Report(EIR) which has identified the Lew F. Galbraith Golf Course as the preferable location for the disposal of dredge materials for the Port of Oakland 42's foot project. It is also our understanding that the draft EIR concludes that there will be no adverse impact to the community because subsidies will be provided for seniors and juniors at other golf courses in the vicinity to mitigate the loss of access to the Lew F. Galbriath Golf Course. Furthermore, it is my understanding that subsidies will apply only to the "residents" of Oakland.

1

Our club has 115 members 11 of which are Oakland residents and will be eligible for subsidies. The subsidies are identified as the method of mitigation the impact of golfers.

Our statistics show that the EIR grossly underestimates the impact to the golf community.

We have been playing golf every Tuesday and Thursday at Galbraith for the past 30 years. Where will we play after Galbraith closes?

Sincerely,



Al Kidder
Secretary for the Seniors
In Retirement (S.I.R.S.)



THE SWINGING SAMURAI

MAY 1994

Mr. Roger Golden
Corps of Engineers
Environmental Branch
211 Main Street
San Francisco, Ca. 94105

Dear Sir:

- 1 | It has been brought to our attention that you have prepared a draft Environmental Impact Report(EIR) which has identified the Lew F. Galbraith Golf Course as the preferable location for the disposal of dredge materials for the Port of Oakland 42's foot project. It is also our understanding that the draft EIR concludes that there will be no adverse impact to the community because subsidies will be provided for seniors and juniors at other golf courses in the vicinity to mitigate the loss of access to the Lew F. Galbraith Golf Course. Furthermore, it is my understanding that subsidies will apply only to the "residents" of Oakland.

Our clubs has 52 members. Only 9 members or 19% of our club are Oakland residents and will be eligible for subsidies. The subsidies are identified as the method of mitigation the impact of golfers.

Our statistics show that the EIR grossly underestimates the impact to the golf community.

Where will the majority of the members play after Galbraith's closure?

Your truly,

Shig Nakayama
President

CLUB MEMBERS BY CITIES

OAKLAND	9
ALAMEDA	7
ALBANY	3
BERKELEY	6
FREMONT	1
HAYWARD	4
CASTRO VALLEY	1
EL CERRITO	7
KENSINGTON	1
RICHMOND	4
SAN LEANDRO	5
SAN LORENZO	2
SAN FRANCISCO	1
WALNUT CREEK	1
Total Members	52

EAST BAY SENIORS
C/O LEW F. GALBRAITH GOLF COURSE
10505 DOOLITTLE DRIVE
OAKLAND, CALIFORNIA 94603

Mr. Roger Golden
Corps of Engineers
Environmental Branch
211 Main Street
San Francisco, Ca. 94105

May 1994

Dear Mr. Golden:

- 1 | It has been brought to our attention that you have prepared a draft Environmental Impact Report(EIR) which has identified the Lew F. Galbraith Golf Course as the preferable location for the disposal of dredge materials for the Port of Oakland 42's foot project. It is also our understanding that the draft EIR concludes that there will be no adverse impact to the community because subsidies will be provided for seniors and juniors at other golf courses in the vicinity to mitigate the loss of access to the Lew F. Galbriath Golf Course. Furthermore, it is my understanding that subsidies will apply only to the "residents" of Oakland.

Our club has 70 members 19 of which are Oakland residents and will be eligible for subsidies. The subsidies are identified as the method of mitigation the impact of golfers.

Our statistics show that the EIR grossly underestimates the impact to the golf community.

We have been playing golf once every month and holding our annual two day golf tournament at Galbraith for the past 30 years. Where will we play after Galbraith's closes?

Sincerely.



John Houghton
President - East Bay Seniors

Brian Keefer
on behalf of Desmond Muirhead Inc.
Golf Course Architects and Planners
60 Corte Ortega #6
Greenbrae, Ca. 94904
April 18, 1994

Ms. Jody Zaitlin
Environmental Department
Port of Oakland
530 Water Street
Oakland, Ca. 94607

Dear Ms. Zaitlin,

I would like to comment on the potential impacts from a planning and economic standpoint which may result from closing the Lew F. Galbraith Golf Course and using the site as a disposal site for the dredgings from the harbor floor. Obviously the harbor must be dredged to avoid losing precious business for the City of Oakland, but we strongly feel that an alternate disposal site would be the positive choice for Oakland.

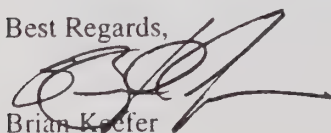
The revenues generated from the Lew F. Galbraith Golf Course should not be ignored when discussing its potential closing, but the direct revenues are not the only economic contribution a golf course makes to the city. The golf course is an extremely important element in the gateway to the City of Oakland. It is a substantial amenity of the community which acts as an economic draw to the area encouraging business for the airport, hotels, restaurants, and other businesses in Oakland. Obviously, a dumping grounds for dredgings could not be considered such an amenity. Closing the course and using the site as a dumping grounds for the dredgings would have a negative economic impact on the entire area, let alone serve as an embarrassment to the people of Oakland. Preservation of the golf course, if not remodeling to further enhance the gateway to the city, would obviously be the logical choice, and choosing an alternate site for the disposal of the dredgings is imperative. 1

While the plan proposed by the port authority involves construction of a new golf course, the people presently employed by the golf course as well as the people who play the course cannot be sufficiently relocated for a period of 5 to 7 years while the golf course is closed. Subsidies for the displaced senior and youth golfers does not take into consideration the other people who regularly play the course as well as golfers from out of town. Furthermore, subsidies do not guarantee tee times at other golf courses in the area which are already overcrowded. Many successful remodels of golf courses are completed without closing the golf course during construction. This is a normal procedure for remodeling of golf courses. If a new golf course is desired by the community, it can be accomplished without closing the golf course for 5 to 7 years, and the negative affects can be avoided. 2

When considering the impacts of a 5 to 7 year absence of a golf course and presence of a dredging disposal site on the area, it would be wise to consider the importance of those particular 5 to 7 years. The San Francisco International Airport has recently obtained approved plans for the construction of a new substantially expanded airport facility. The Oakland International Airport and the City of Oakland need to be considering plans to upgrade the area immediately in order to compete, rather than moving in a negative direction by using an existing amenity, such as a golf course, as a dumping grounds for dredged material. It is not difficult to show the importance of preserving if not upgrading the present golf course and other features of this area. 3

Please take these issues into consideration, and we are confident that you will agree that an alternate disposal site for the dredgings is the best choice for the City of Oakland.

Best Regards,



Brian Keefer



Northern California Golf Association

POST OFFICE BOX NCGA □ PEBBLE BEACH, CALIFORNIA 93953 □ (408) 625-4653 □ FAX: (408) 625-0150

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COMMUNICATIONS

KEVIN O'CONNOR
COURSE RATING & HANDICAPPING

ROGER D. VAL
RULES & COMPETITIONS

PETE WILMOT
RULES & COMPETITIONS

November 15, 1993

To Whom It May Concern:

In regards to the matter of Lew Galbraith golf course being used as a recipient of dredging material resulting in its closure, the Northern California Golf Association would like to see some other alternative considered that would keep the course open for public play.

The Lew Galbraith golf course provides a fine public golfing facility in an area where there are not enough public courses available. The golf course offers favorable environmental aspects housing a variety of wildlife. It can contribute to the local economy not only as a source of revenue from green fees but will also keep the people in the area where they will purchase local goods and services.

We are hopeful the eventual plan adopted will allow the Lew Galbraith golf course to remain open for public play.

Sincerely,

John Nakamura, President
Northern California Golf Association



Lew F. Galbraith Golf Course

10505 Doolittle Drive • Oakland, California 94603 • (510) 569-9411 • (510) 569-3429

April 26, 1994 *

Ms. Jody Zaitlin
Environmental Department
Port of Oakland
530 Water Street
Oakland, CA 94607

Re: Draft Environmental Impact Report

Dear Ms Zaitlin:

In order to properly evaluate the impact of the dredging project on the City of Oakland pertaining to the closure of the Lew F. Galbraith Golf Course, we make the following comments:

Socio Economic Impacts

The Draft Environmental Impact Report (4.7.4.6) states:

1. "The Port has received no rent at all since July 1987."

The gross revenue of the golf course is approximately \$1.2 million per year, and the City of Oakland is paid over \$100,000 per year in concession payments.

2. "The City's concessionaire owes the City over \$300,000 in unpaid contract obligations."

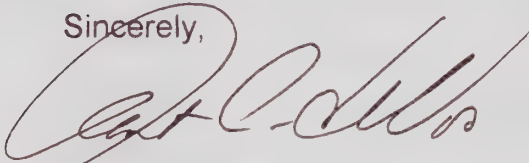
The concessionaire does **not owe** the City any amount in unpaid contract obligations. The City made an agreement with a Superior Court Receiver appointed during equity litigation not to collect lease payments for approximately 3 years (1984-1987). The concessionaire has agreed to reimburse the City (even though it is not obligated to do so) during the next 5 years. At the current income level, over \$1,000,000 of lease payments will be lost to the City during the dredging period.

3. "The temporary loss of recreational use of the golf course facility is significant, but mitigable....., the Port of Oakland would construct a new public golf course on top of the dredged material."

Page Two
J. Zaitlin
April 26, 1994

- 3 The loss is not fully mitigable because the displaced golfers might not be able to play the proposed new golf course 7 years from now. The proposed new golf course cost is not included in the Draft Environmental Impact Report, and might not be economically feasible considering the following facts:
- a. The soil required to create the new golf course on top of the dredge material is approximately 800,000 cu. yds. At the cost of \$10.00 per yard, the cost will be \$8,000,000.
 - b. The trucking required to bring the soil for the golf course construction has not been addressed in the Draft Environmental Impact Report.
 - c. The cost of constructing a new golf course has to be paid for by the golfers, if not paid by the dredging project. At a total cost of \$14,000,000, the debt service will make the green fees not affordable for the current golfers of the Lew F. Galbraith Golf Course.

Sincerely,



Aart C. de Vos
Ransom, McKay Golf Inc.

April 16, 1994

Corp of Engineers
Environmental Branch
211 Main Street
San Francisco, CA 94105

Attn: Roger Golden

As I was unable to attend the public hearing on April 14, I am submitting my thoughts in writing.

It seems to me, that there are alternatives to filling the Galbraith Gold Course. This seems like a waste of needed recreational facilities, when there are other sites which could be used.

I am enclosing a plot plan with two areas indicated in yellow, which could be used.

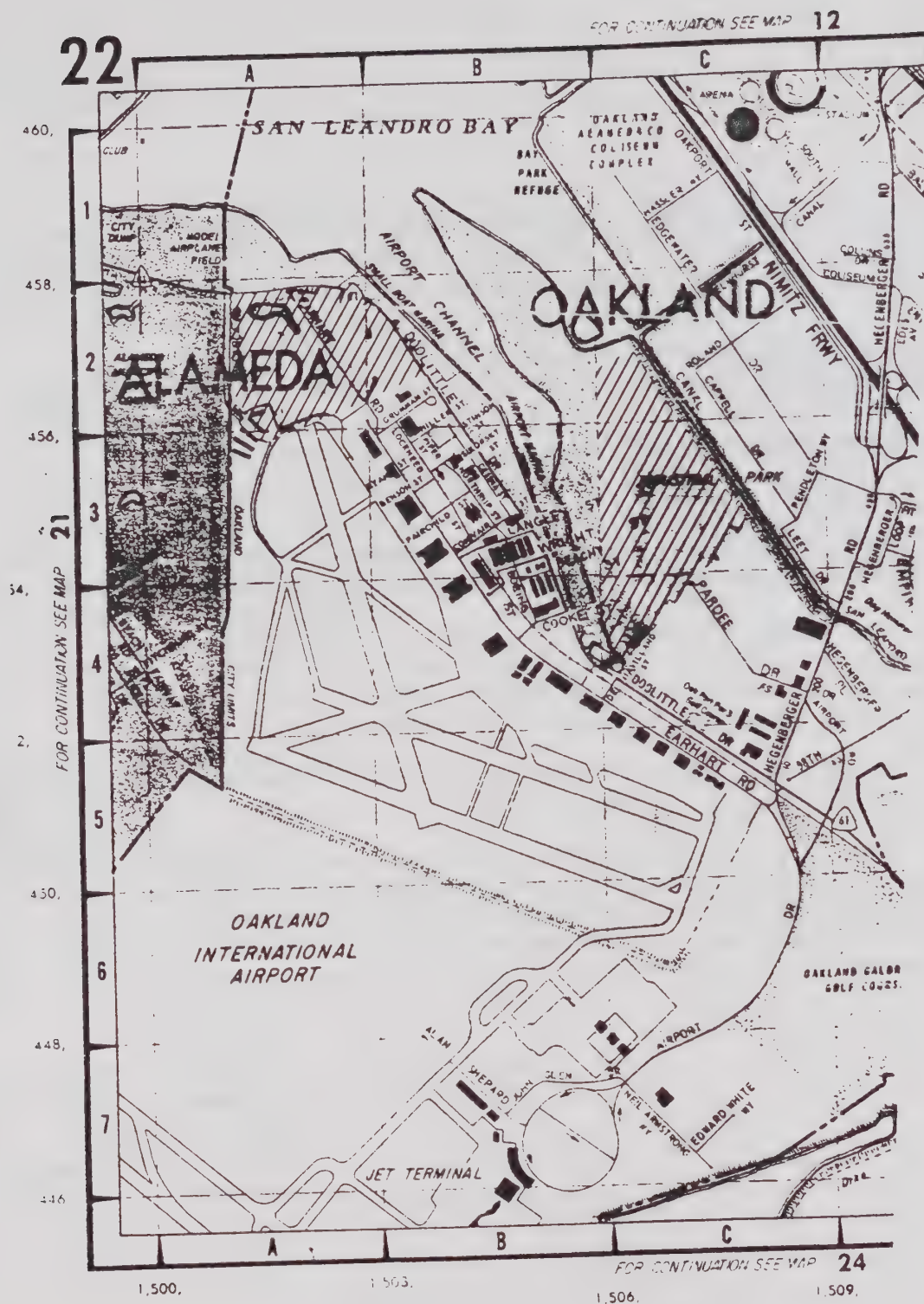
The end of Pardee Drive could have a retainer put at water's edge and the fill could later be transformed into bike/walking trails and picnic areas. The other area wouldn't hold as much material, but would be available, if needed, in the future.

Sincerely,



Shirley Jewell
22670 Beech Street
Hayward, CA 94541

(510)537-6754



Date: 5-2-94

Mr. Roger Golden
 U.S. Army Corps of Engineers
 Environmental Branch
 211 Main Street
 San Francisco, CA 94105

Dear Sir:

It has been brought to my attention that you have prepared a draft Environmental Impact Report (EIR) which has identified the Lew F. Galbraith Golf Course as the preferable location for the disposal of dredge materials for the Port of Oakland's 42 foot project. It is also my understanding that the draft EIR concludes that there will be no adverse impact to the community resulting from odors, dust, increased trucking, seismic threat to Doolittle Road and the San Leandro waste water treatment plant, or the loss of a unique and vital community recreational facility, the golf course.

The draft EIR conclusions on these issues are inaccurate or based upon inadequate information for the following reasons.

Odors

The draft EIR states that if odors are encountered, appropriate measures will be taken to address the odors. The draft EIR, however, does not identify what those measures are. In the absence of specific methods identified for odor abatement, the draft EIR is deficient in addressing potential odor problems. | 1

Dust

The draft EIR identifies dust as potentially causing a large impact to the community. However, the draft EIR states that this potential impact will be mitigated by spraying the dredged material placed at the golf course with water to keep it wet and to prevent dust. If the objective of the use of the golf course is to provide a drying facility for the mud dredged from the harbor, how will the mud be dried if it is constantly being sprayed with water to abate dust? | 2

Trucking

No study was performed for traffic in the vicinity of the golf course, and it is therefore not known if the proposed use of the golf course will result in a significant impact to traffic. Nonetheless, the draft EIR states that no significant impact to traffic will occur. This conclusion is inaccurate because it is not based upon the criteria set forth in the draft EIR for | 3

- 3 determination of a significant impact to traffic, which is identified as a 3 percent increase in vehicular traffic.

Seismic Threat

- 4 The draft EIR does not address the impact to the structures identified as potentially being impacted. The proposed use of the Galbraith golf course will surround the San Leandro waste water treatment facility on two sides. Failure of the levees could result in the loss of the use of the treatment facility to the community. The fact that this potential impact is identified as insignificant is unacceptable. Furthermore, the draft EIR does not identify Airport Road, the only road into or out of Oakland International Airport as a structure which could be impacted, and does not therefore discuss the significance of this structure being impacted. Again, this is unacceptable.

Loss of a Unique Community Recreational Facility

- 5 The golf course is a unique facility because of the relaxed social atmosphere which allows cross-cultural and cross-generational relationships to occur. Many of the people who come together at the golf course to play golf are from very diverse backgrounds, and do not have an opportunity to come together under any other conditions in their normal lives. The facility allows community youth to interact with community elders, and provides a place for our community's youth to have role models. These are elements which are absolutely vital to the healthy functioning of a society and a community. This loss to the community has not been addressed in the draft EIR.

For these reasons, I do not believe that the draft EIR accurately or adequately assesses the impact of the Port's 42 foot project to the community. In addition, I do not believe that putting a disposal facility for mud dredged from the harbor next to the only road entering or leaving the East Bay's only international airport is appropriate for aesthetic or public image purposes.

I am a part of the business or residential community located in the immediate vicinity of the Galbraith golf course, and believe that the impact to my community has not been accurately or adequately assessed in the EIR. I herewith request that you reassess the accuracy and adequacy of the EIR for it's impact to my community and then re-evaluate your conclusions for the appropriateness of the Lew F. Galbraith Golf Course as a disposal site for dredging spoils from the Port's 42 foot project.

It makes more sense to use a facility which will eventually be used for the drying of dredged material, such as Leonard Ranch, than to cause impacts to a community as identified in this letter, and to deny a community a unique and vital recreational resource.

*Or Alameda Naval Air Station
which is due to close anyway -
R.B.K.*

Sincerely,

Signature

Robert B. Krause

Printed Name

Robert B. Krause

Address

*98 Montell St**OAKLAND, CA. 94611*

Telephone Number

(510) 653-8629

PHK

0042.F12

Date: 5/5/94

Mr. Roger Golden
U.S. Army Corps of Engineers
Environmental Branch
211 Main Street
San Francisco, CA 94105

Dear Sir:

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Dust

- 2 | The draft EIR identifies dust as potentially causing a large impact to the community. However, the draft EIR states that this potential impact will be mitigated by spraying the dredged material placed at the golf course with water to keep it wet and to prevent dust. If the objective of the use of the golf course is to provide a drying facility for the mud dredged from the harbor, how will the mud be dried if it is constantly being sprayed with water to abate dust?

Trucking

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determination of a significant impact to traffic, which is identified as a 3 percent increase in vehicular traffic. 3

Seismic Threat

The draft EIR does not address the impact to the structures identified as potentially being impacted. The proposed use of the Galbraith golf course will surround the San Leandro waste water treatment facility on two sides. Failure of the levees could result in the loss of the use of the treatment facility to the community. The fact that this potential impact is identified as insignificant is unacceptable. Furthermore, the draft EIR does not identify Airport Road, the only road into or out of Oakland International Airport as a structure which could be impacted, and does not therefore discuss the significance of this structure being impacted. Again, this is unacceptable. 4

Loss of a Unique Community Recreational Facility

The golf course is a unique facility because of the relaxed social atmosphere which allows cross-cultural and cross-generational relationships to occur. Many of the people who come together at the golf course to play golf are from very diverse backgrounds, and do not have an opportunity to come together under any other conditions in their normal lives. The facility allows community youth to interact with community elders, and provides a place for our community's youth to have role models. These are elements which are absolutely vital to the healthy functioning of a society and a community. This loss to the community has not been addressed in the draft EIR. 5

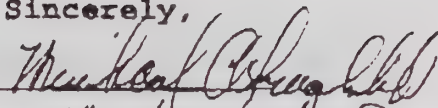
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It makes more sense to use a facility which will eventually be used for the drying of dredged material, such as Leonard Ranch, than to cause impacts to a community as identified in this letter, and to deny a community a unique and vital recreational resource.

Sincerely,

Signature



Printed Name

Michael A. Smalik

Address

10533 Englewood Dr

Oakland, CA 94605

Telephone Number

510-569-5053

PHK

0042.F12

LADIES AND GENTLEMEN , CITIZENS OF OAKLAND COMMUNITY , STATE OFFICIALS , MEMBERS OF THE CITY COUNCIL AND PORT OF OAKLAND : I AM MRS REOLA L, FREEMAN AND I COME BEFORE YOU THIS DAY , THE 14TH DAY OF APRIL 1994 , TO BRING YOU THIS CRUCIAL AND IMPORTANT MESSAGE : OUR YOUTH IN THE FLATLANDS OF OAKLAND , ARE BEING SLAUGHTERED LIKE CATTLE EVERYDAY. CRIME AND DRUGS ARE ON THE RISE , ESPECIALLY FOR THE AFRICAN AMERICAN , AND FAMILIES ARE BEING DESTROYED ON A DAILY BASIS.

IF YOU HAVE ALREADY MADE UP YOUR MINDS ABOUT THE MATTERS WE ARE HERE TO DISCUSS TODAY, I ASK YOU TO AGAIN , RE-EXAMINE YOUR CONSCIENCE , AND STOP AND THINK ABOUT THE FUTURE OF OUR CHILDREN .

WE ARE ALWAYS LOOKING FOR A SOLUTION TO A PARTICULAR PROBLEM, WHEN MANY TIMES, WE HAVE THE SOLUTION IN THE PALM OF OUR HANDS, AND DONOT TAKE HEED.

IF JOBS WILL BRING ECONOMIC SECURITY TO THE FAMILIES THAT ARE UNDERPRIVILEGED , THEN I SAY THE DREDGING HAS A SIGNIFICANT PURPOSE. IF THE DREDGING CAN BE DONE WITHOUT DESTROYING A PLACE FOR SENIORS TO ENJOY, OUR YOUTH TO EXPAND ACADEMICALLY AND KEEP THEM OFF OF THE STREETS, HELP THE FAMILIES OF THE UNDERPRIVILEGEDS, THEN I SAY THE DREDGING DEFINITELY HAS A PURPOSE. BUT IF NEITHER OF THESE GOALS CAN BE ACCOMPLISHED, AND AT THE PRESENT SITE, WITHOUT MOVING TO AN OUT- LYING DISTRICT, THEN DREDGING HAS NO REAL PURPOSE.

THERE IS PLENTY OF SPACE FOR A NINE HOLE GOLF COURSE TO SERVICE BOTH THE SENIORS , YOUTH AND KEEP JOBS OPEN TO SOME OF THE UNDERPRIVILEGED THAT WORK AT THE PRESENT SITE NOW.

SINCE IT IS STATED IN THE MITIGATION THAT THE CONTINUED OPERATION OF DRIVING RANGE , CAFETERIA AND CLUB HOUSE WILL NOT BE DEMOLISHED. WHY WHY NOT KEEP A NINE HOLE OPEN GOLF COURSE, FOR THE SENIORS WHO HAVE PAID THEIR DUES IN TAXES AND TIME AND THE YOUTH WHO DESERVES TO HAVE SOME PLACE OTHER THAN SLAUGHTERED HOUSES FOR RECREATION TO LET OUT THEIR FRUSTRATIONS.

HOW MUCH RECREATION ARE IN THE FLATLAND OF OAKLAND FOR OUR YOUTH AND, ARE FOUND WITHOUT GOING INTO OTHER AREAS SUCH AS GOLF, BOWLING SOCCER, SWIMMING AND OTHER SPORTS .

I HAVE WORKED VERY HARD FOR OVER (10) YEARS TO BRING ABOUT ACADEMIC AND SPORTS ACHIEVEMENTS FOR OUR JUNIORS.

THE JUNIOR GOLF PROGRAM IS WELL KNOWN THROUGHOUT THE BAY AREA, NORTHERN CALIFORNIA GOLF ASSOCIATION , ALONG WITH THE PROFESSIONAL GOLFERS ASSOCIATION OF AMERICA IN PALM BEACH GARDENS FLORIDA SINCE 1987 . I HAVE RECEIVED MANY AWARDS FROM PARENTS, WESTERN STATES GOLF ASSOCIATION, WESTERN ADDITION LIBRARY AND MILTON MARK .

I KNOW THAT THE JUNIOR PROGRAM HAS GIVEN MANY JUNIORS POSITIVE

ALTERNATIVE TO OTHER COMPETING LIFESTYLE INFLUENCES.
ACCOMPLISHMENTS OF INDIVIDUALS ARE VERY POSITIVE INDICATORS.

ALL OF THE REWARDS AND HELP GIVEN HAS BEEN THE INSTRUMENTAL
IN MAKING THE PROGRAM THE SUCCESS IT IS TODAY, AND I WANT TO
THANK THEM THEM AGAIN.

OUR PROGRAM HAS OPERATED ON BASICALLY NO OUTSIDE MONIES OR
DONATIONS EXCEPT FROM PARENTS OF THE JUNIORS, AND THE
RANSOM/MCKAY GRANTS AND THE USE OF THEIR FACILITERS. OUR LADIES
CLUB AND MENS CLUB ALONE WITH THE BANKS OF AMERCIA HAS GIVEN
CEERTIFICATES OF MONIES FOR SCHOLARS AWARDS FOR THE ACADEMIC
AND ACHIEVEMENTS TO THE INDIVIDUALS WHO HAVE PROVED THEM SELFS

3 | MANY HAVE GONE TO COLLEGE. CAN YOU AFFORD TO TURN AWAY FROM
SOMETHING THAT IS GOOD FOR OUR YOUTH. ALL WE HEAR TODAY .IS:
HELP THE CHILDREN, HELP THE CHILDREN; 'WELL.I ASK YOU TO
RECONSIDER WHAT YOU MAY DO. SENDING THE JUNIORS TO OTHER GOLF
COURSES NOT THE ANSWER. THERE IS AND OVERFLOW AT THE ALAMEDA
GOLF GOURSE EVEN WHEN WE TRY TO HAVE THE YOUTH ON THE PAR 3
GOURSE THEY SAY WE HOLD UP PLAY,HAVE THEY FORGOTTEN THAT THEY
HAD TO LEARN TOO. CHABOT GOLF COURSE IS TOO HILLY FOR THE
YOUNGSTER AND THE SENIORS UNLESS THEY ARE RIDING . A RULES IS
THAT THE YOUTH CANNOT RIDE THE CARTS. THE MARINA GOLF GOURSE
ALREADY HAVE AN OVERFLOW TOO.

4 | GOLF IS NOT A" RICH MAN GAME" AS IT IS SOME TIME LABELED. IT
IS AND AVENUE FOR ALL YOUTH, WHERE FAIR PLAY AND SPORTSMANSHIP
ARE THE NAME OF THE GAME. WHERE THE WORD "RESPECT" IS TAUGHT
AS AN INTEGRAL PART OF THE "THREE R'S" GOLF IS AT THE FORE
FRONT OF SPORTS TODAY , AND OPPORTUNITIES ARE THERE THAT WERE
NEVER KNOWN BEFORE- FOR ALL OUR YOUTH. AGAIN I SAY TO YOU,THERE
ARE SOME FACILITES ON THE GOLF COURSE THAT COULD BE CONVERTED
INTO ROOM FRO THE SENIORS AND JUNIORS, WITHOUT TOO MUCH MAJOR
CHANGE.

I ASK YOU FOR YOUR INDULGENCE AND CONSIDERATION, BUT IF YOUR
HEART DOES NOT LEAD YOU TO THIS ALTERNATIVE, THEN I DONOT
THINK WE SHOULD LEAD OUR SENIORS AND YOUTH TO BELIEVE THAT THEY
WILL HAVE SOMETHING THEY WILL NOT. JUST SAY THAT YOU WANT
TO CLOSE THE GOLF COURSE AND AT LEAST THAT WILL BE THE HONEST
WAY AND AN ANSWER THE YOUTH CAN LIVE WITH. THERE ARE SO MANY
DISHONEST THINGS FOR THEM TO THINK ABOUT AND THIS SHOULD NOT
BE ONE OF THEM.

THANK YOU FOR YOU CONSIDERATION, AND IF I CAN BE OF ANY HELP,
PLEASE DONOT HESITATE TO LET ME KNOW.

AGAIN I THANK YOU FOR ALLOWING ME TO SPEAK.

TO :
THE PORT OF OAKLAND:
CITIZENS AND OAKLAND COMMUNITY:
STATE OFFICILS:

984
LATS BEGIN
Bay Area GOLFERS



uture of Yesterday, Today and Tomorrow



COMMUNITY Recreation Program
FOR ALL BAY AREA YOUNG

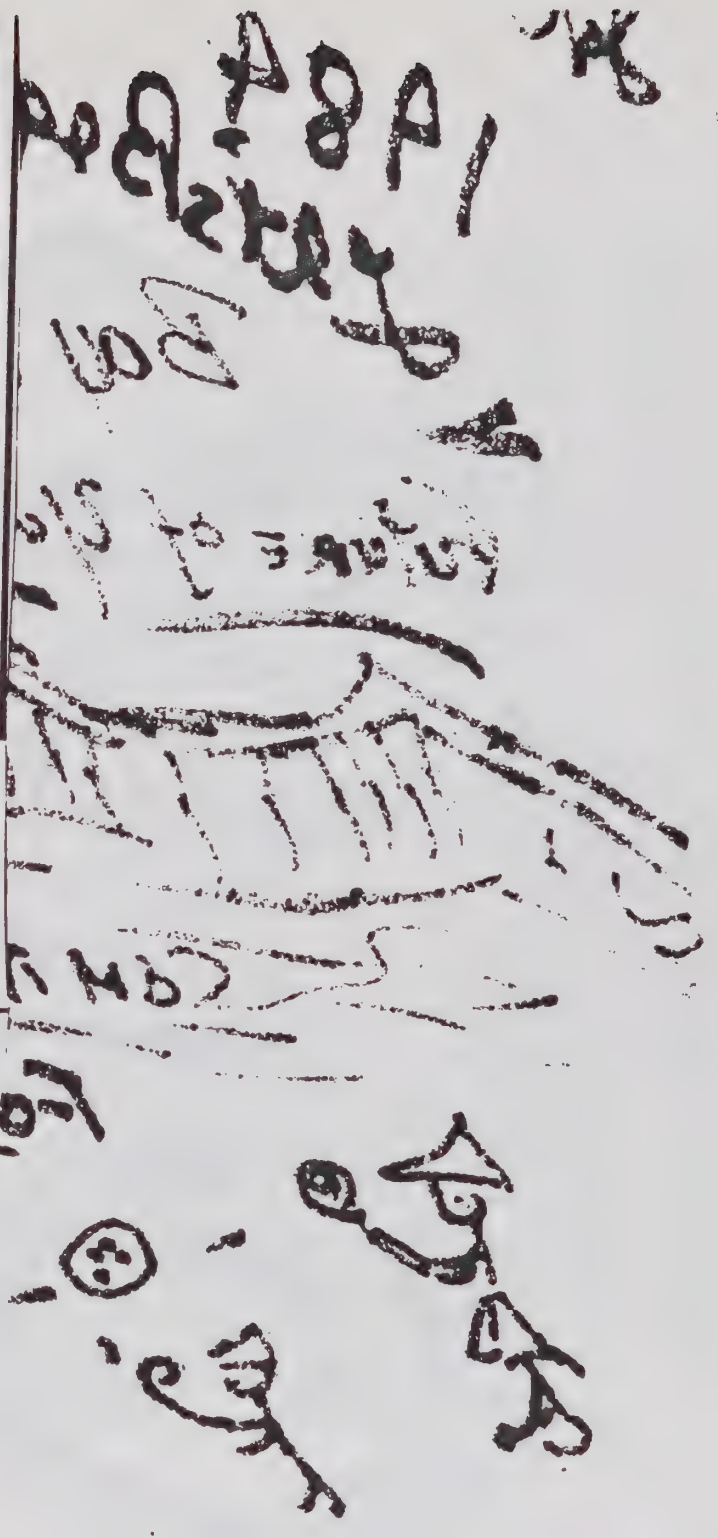


M-321



ABLE FIELDS SHARES HER SUCCESS AND MOTIVATION WITH YOUTH

M-322



March 12, 1994

Mark McDonald
Port of Oakland
530 Water Street
Oakland, CA

Dear Mr. McDonald:

The Junior Gold Program at Galbraith Golf Course is an asset to the Oakland community. This program is one of the few remaining efforts that has succeeded in providing a wholesome environment and positive alternatives for Bay Area youth. Galbraith's program has influenced the growth and development of youth who range from three to seventeen years of age. 1

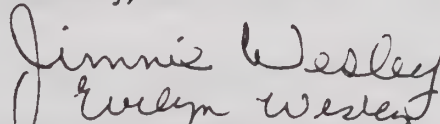
These juniors have learned golf etiquette, team work, self-discipline and good sportsmanship. They receive academic awards for having good grades and for maintaining high academic standards. many have qualified for academic and golf scholarships which allow them to pursue a college education. Former Galbraith juniors are currently students at St. Mary's College, Southern University, Jackson State University, U.C. Berkeley and Grambling State University. One junior has just become a professional golfer.

The program has created an extended family for the youth. These families have held picnics, fund raisers, educational and cultural field trips as well as study groups. Our daughter, Nia began at four and is now thirteen years old. She has played in numerous Northern California tournaments. She has travelled to three states and six major cities. In each instance she became a medalists who represented Galbraith's Junior Golf Program, from Oakland, California. She and other juniors have been featured on local television programs and have been the subject of newspaper and magazine articles describing their accomplishments.

Galbraith Junior Golf Program has provided Bay Area youth with an opportunity to meet and watch Jim Dent, Chi Chi Rodriguez, Johnny Miller, Calvin Pete and other professional golfers. They have golfed with former professional athletes, Oakland's former Mayor and other positive role models.

This program has proved its effectiveness and deserves to continue uninterrupted. The Port of Oakland and civic leaders should contribute to the growth and expansion of this successful youth development program.

Sincerely,


Jimmie and Evelyn Wesley

cc: R. Freeman
Oakland Tribune
H. Ransome

4021 Malcolm Ave.
Oakland, CA 94605
March 1, 1994

Port of Oakland
Oakland California
Attn: Mark McDonald

Dear Sir,

1 In 1984 a junior golf program,
under the direction of Ms. Peola Freeman
was begun at Galbraith Golf Course.
This program has been very successful
in building self-esteem among its
members and giving them a positive
sense of direction so needed by our
youth in today's society.

My grandson, who is eleven years
old, is just at that vulnerable age
when youth are greatly influenced
by their peers, their environ and the
opportunities confronting them - be
they good or bad. As a member
of the junior golf program at Galbraith
for the past four years he has
definitely been influenced positively

by the experiences afforded him.

Most of the 35 or more youth enrolled in the program are minority youth. They love the game and consequently abide by the high moral and educational standards which the program demands.

In order to participate the youth are required to achieve and maintain high academic standing. The Bank of America has rewarded youth of this program with bonds for their academic excellence.

As it seems inevitable that the Port of Oakland will be closing Galbraith Golf Course in the near future it will mean an end to this important resource for youth just at a time when it is beginning to flourish and is so greatly needed.

I write this letter to ask that the Port of Oakland please research options to help maintain this valuable program for the youth of Oakland. Facilities for classroom instruction, golf lessons and a practice area are needed.

Although the number affected may seem small in comparison to some projects, it is with concern and attention to the small things - one by one - that we will be able to make a difference; impact on our youth, improve their lives and thereby secure the future (our future).
Won't you please help.

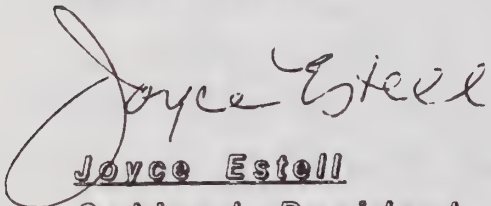
Sincerely,
Gerald A. Baxter
Concerned citizen
Grandparent
Program Volunteer

Please do not close The Galbraith Golf Course. With more and more schools eliminating athletic programs and closing down playgrounds our children must seek out other places within the community to release this energy. This is why the community must have places and programs available for the children to get involved to keep them from turning to bad elements.

The Galbraith Junior Golf Program is just the alternative the community can turn to provide an outlet. The program's cost has been kept low to make it affordable for all children. My daughter has been involved with the program for over a year and it has taught her so much about life itself. She's learning not only the game of golf, but how to deal with challenges and overcoming barriers.

The children are drilled on how important Attitude, Academic and Achievement are in everything they do. Please continue to allow our children to have this opportunity available and be expose to this great program. DO NOT TURN YOUR BACKS ON OUR FUTURE!

Sincerely.


Joyce Estell
Oakland Resident

3-26-94

To Whom It May Concern:

1

I am the parent of Wilford Armstrong, who takes golf lesson from Mrs Reola Freeman at Leav Hallwith Golf Course.

I am very torn by the closing of Leav Hallwith. My son has learned a great deal in the world of golfing, and he looks forward to his lessons every Saturday with Mrs Freeman at the golf course.

Mrs Freeman is great with the kids, and they all love her. I've seen a change in Wilford since he begin golf. He pays better attention, more courteous and better all around. He's a good child now, but he is also at the age where if you take his work place away, what will he have. Its like taking the ice skating rink from a ice skater.

I worry that all the hard work Mrs. Freeman has done for the kids will be thrown away if she has nowhere to teach. There is so much wrong on the streets for kids to get into. My son is 14. I want him to go forward not ~~be~~ backward.

Leav Hallwith Golf Course needs to stay open.

Sincerely,

Phyllis Watson

5315 Hillen Drive
Oakland, CA 94619
March 4, 1994

City of Oakland
505 14th Street
Oakland, CA 94612

Dear Sir/Madam:

This concerns the golf program for children and teenagers at Galbraith Golf Course. The program has been in place for several years under the direction of Ms. Reola Freeman.

Ms. Freeman is a concerned, hard-working professional who devotes her time and energy to teach our young people the game of golf. She is very dedicated in her efforts to direct these kids toward a goal oriented and responsible approach to life. The program is also responsible for keeping her "kids" off the streets and out of trouble. The kids are rewarded for excelling in the classroom as well as on the golf course.

Now the Port and City of Oakland have made a decision to dredge part of the Bay and dump the dredging onto the golf course. This will effectively close the golf course which is used by thousands of our citizens for recreation. Where will our young people and other citizens go to play golf?

In the interest of our inner city youth and other citizens, I urge you to reverse your decision and maintain Galbraith Golf Course.

Sincerely,


Jacqueline Singleton

js

March 12, 1994

To Whom it May Concern:

1 I am writing to request that the Lew Galbraith Golf Course be kept open.

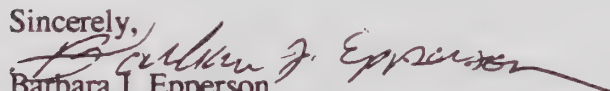
Lew Galbraith Golf Course was founded around 1966 in the City of Oakland. This golf course has served as a recreational spot for avid golfers for many, many years.

Lake Chabot is the only other public golf course in Oakland. Lew Galbraith serves the flatland district of Oakland and is conveniently located on a large parcel of land. There are not many recreational spots for those that engage in other sports besides, basketball, baseball, etc. The City of Oakland does not even have one bowling alley. Residents have to go outside of Oakland to participate in bowling activities. Closing the Lew Galbraith Golf Course will force many Oakland golfers to use the public golf course in Alameda, thereby taking revenues to the city of Alameda.

The population which benefit from this golf course live primarily in Oakland's flatland neighborhoods who suffer from a lack of employment opportunity and youth recreational programs. My godson has participated in the youth golf program for the past several years. It has opened up a vast opportunity to him, as golf is not a sport that is heavily participated in by African Americans.

Thank you for your attention.

Sincerely,


Barbara J. Epperson
Concerned Oakland Resident

Mr & Mrs Ado Bolton

9239 Coral Road
Oakland, CA 94603

MARCH 4, 1994

Port Of Oakland
530 Water
Oakland, CA

Re: Galbraith Golf Course

To whom it may concern:

I am writing to introduce my family and express my disappointment of the closing of the Galbraith Golf course.

My husband and I, have one child, Jonathan Bolton.
We live at the above address. We are very surprised to learn about the future closing of the course.

Please don't close the golf course , if there is any way possible.

Our son Jonathan is a part of the Jr golf league. He enjoys the fresh air and sunshine and that the children learn from Ms. Freeman

He looks forward to all the activities and playing with the friends he has made since attending.

Jonathan is nine years old and he asked us to write on behalf of the golf course.

Sincerely,

A handwritten signature in cursive script that reads "Mr & Mrs Ado Bolton". The signature is written in dark ink and is positioned above the printed name.

Mr & Mrs Ado Bolton

To the Port of ...

1 I am Maximum Franklin. I have been in the golf program since 1992. I am six year old now.

My Golf is very important to me. I have meet nice boy and girls. I love for my mother to take me to the golf on Sat-noon.

Mrs Freeman and Mr Abbott loves me too.

Please keep this Golf course open. I have asthma but I like a fun with my friends.

This is very important for me to have a nice place to go every week after my school. Please don't take my recreation away from me.

God Bless you

Maximum Franklin and Mother

3-1-90

To The Fort of Oakland,

I am very proud to be a part of the Jr. Gold Program at Lew Gall with Gold Course. I'm a parent who utilizes this program for my children.

This program gives my kids the ability to have confidence in themselves and as well in others. It also teaches them to be competitive and gives them options as to what could be a professional career.

My personal thought is that this program gives our youth a place to feel good about themselves, a place to go and be productive, and even make a change in their entire future.

Sincerely
Jocia Lamison
Parent Participant

TO THE PORT OF OAKLAND

1 I AM WRITING THIS LETTER TO YOU TO VOICE MY CONCERNS ON THE PROPOSED CLOSING OF THE GALBRAITH GOLF COURSE. OR SHOULD I SAY THE INEVITABLE CLOSING OF THE COURSE TO ALLOW DREDGING.

MY CHILDREN HAVE BEEN INVOLVED IN AN INVALUABLE GOLF PROGRAM FOR THE PAST YEAR. I KNOW THAT IT IS THROUGH THEIR INVOLVEMENT AT GOLF THAT HAS INCREASED THEIR SELF-ESTEEM, THEIR GRADES AND RESPECT NOT ONLY FOR THEMSELVES, BUT DEMANDING RESPECT FROM OTHERS THAT THEY ENCOUNTER.

I WANT YOU TO KNOW THAT WHEN YOU CLOSE THIS COURSE THAT YOU ARE RESPONSIBLE FOR CLOSING YET ANOTHER DOOR TO OPPORTUNITY FOR OUR CHILDREN. I SAY OUR CHILDREN BECAUSE IT IS THROUGH THEM THAT OUR FUTURE LIES. ALL TOO OFTEN OUR CHILDREN PAY A HIGH PRICE FOR THEIR UNCERTAIN FUTURE BECAUSE OF MISTAKES, SELFISHNESS, PROFIT MARGINS DECISIONS MADE WITHOUT THEIR BEST INTEREST AT HEART.

SO OFTEN I READ IN THE NEWSPAPERS AND SEE ON THE NEWS HOW BAD OAKLAND IS, HOW DANGEROUS IT IS TO LIVE HERE ALL THE NEGATIVES ARE HERE. IT IS VERY VERY SELDOM WE HEAR THE GOOD THAT IS HERE. THE GOLF PROGRAM AT GALBRAITH IS IMPORTANT NOT ONLY TO MY CHILDREN BUT TO THIS CITY, TO THIS WORLD. THIS IS GOOD. YOU TELL MY CHILDREN WHY THEIR GOLF COURSE IS BEING CLOSED. WHY IT IS THAT THEY HAVE DONE NOTHING WRONG, BUT HOW THIS PROGRAM IS BEING DONE AWAY WITH. I INVITE YOU TO TELL THE CHILDREN.

THANKS FOR YOUR TIME



CAROLYN CHAPPELL

A CONCERNED PARENT

To the Port Of Oakland

Please keep this golf course opened to our Junior Golfers. This program is a positive thing for our children. It is giving poor and minority children a chance in a sport that has not been opened to them in the past.

Oakland has countless youth that are being lured into drugs, gangster rap and so on. We have children killing children. We have children not taking advantage of their education. The boys and girls in this program are being molded into citizens that Oakland can be proud of.

Children in the Junior Golf Program are taught the importance of education, a good attitude and they are challenged to achieve ~~academic~~ academic success. Please keep this program opened. These children will be an asset to our city and ~~can~~ not a liability. Please don't turn these children out on the street. Please use our tax money to aid these children. Help them to be all that they can be. This program is doing just that

Pauline Thomas

Mrs. Mayola L. Lewis
271 Fitzpatrick Rd.
Oakland, CA. 94603

Port of Oakland Commission

1 | When are people not valued as much as mud! That time has come to Oakland. When reviewing the events that have lead up to me writing this letter, I must say that I never thought I'd see the day that **mud** meant more than children, young adults and seniors. That's exactly, what you are saying to the people that use and contribute to the usefullness of the Lew F. Galbraith Golf course. Now hear this, People of East Oakland, the Port of Oakland Commission says, **Your wants, your needs, your interest, your leasure activities, mean nothing to us, when we made the decision to dump mud where you spend a great deal of your time and in the community where you live.**

In this great country we are contantly hearing that young people need positive role models and that old people need to get out and share some of their experiences with the youth. The generation gap needs to be closed so that the young and the old learn to respect each other and become partners in improving this world. When I look at the young golfer and the senior golfers sharing the experience at Galbraith Golf course, I know that my grandson is being a part of the dream that one day the generation gap will be brought closer together. The children enjoy the time and input that is given to them in teaching them to play the game.

The location of this course has afforded my grandson the opportunity to play because it is accessiable to his neighborhood. In his community, not in Montclair, or the Oakland Hills, or Alameda. Our children need to know that their communities also have resource for them. Too many times, in order to participate in other activities, our children have to leave home. Why do our children always have to leave their communities when they want to enjoy life's finer options. What message are we as adults and leaders sending to young growing youth. The message I see, is that **IT'S NOTHING HERE FOR YOU! IF YOU WANT TO DO SOMETHING OR LEARN SOMETHING YOU HAVE TO LEAVE HERE.....NOBODY CARES ABOUT YOU!**

I'm saddened that you have again chosen to take away from our community.

Why can't your mud go in another place.....

Why not Montclair Golf course!

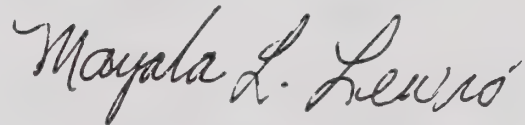
Why not use to mud to refertilize the Oakland hills so that plants and trees can grow there again?

Why do you want to put this **possible toxic waste** in a East Oakland neighborhood?

2

Why would you again, slap our children and seniors in the face and say that **MUD**, means more than **YOU**!

Sincerely

A handwritten signature in cursive script that reads "Mayola L. Lewis". The signature is written in dark ink and is positioned above the printed name.

Mrs. Mayola L. Lewis

3-5-94

TO: Port of Oakland

1

My name is Jesse Lewis III. I have been playing golf at Lewis Galbraith Golf Course for three years. I am now a Fourth Grader at Brookfield School. I enjoyed being apart of the Junior Golf Program. I am going to leese a good place to golf because you need to dump mad on the golf course. My instructor is very sad and so are the other students.

From: Jesse Lewis III

10942 ALPICO ST.
OAKLAND, CA 94603
MARCH 1, 1993

To: Mayor HARRIS, THE BOARD

and "THE PORT;" — "STOP THE MUDDY HOLOCAUST!!

You are making a very harmful and hurtful decision in your plan to close and cover Galbraith Golf Links with mud.

My Son Howard has been a Junior Golfer There since age 7—he is now 12 years of age. Galbraith and its Junior program is invaluable to Howard and many others Children here on "OAKland's Flat Land". Not only has Howard become a skilled young golfer, he is a 7th grader with a 3.50 G.P.A., Excellent behavior, with respect for himself and others. Because the Galbraith Junior Golf Program does not just teach Golf, but is actively teaching good citizenship, with academic achievement evaluated for continued participation in the program; this is a poor plan to take away My Sons' Home Course.

Aside from their many Home Club activities, these young ladies and Gentlemen have been privileged to attend many Professional Tournaments, Silverado, Rancho-Marinetta and the Olympic Club. Our Juniors were well received

1 and greatly encouraged by the many Pro. Golfers
they have spent time with. These activities are all
thanks to the OPERATORS and JR. Golf Instructors
here at Galbraith Golf Links.

How much do you really "hurt" and "dislike" the
Violent headlines about our youth? NOT TOO MUCH!!
As you are willing to destroy and discourage
yet another group of Oakland Children.

The Port will gain by throwing mud in my
sons face? HARDLY!! Your participation
in this Holocaust on our youth is
insufferable!!

Another SAD OAKLAND Mom,
Ellen J. Oliver
ELLEN J. OLIVER

2/26/84

to the Best of Oakland.

I am one of the instructors,
for the Jr. Boy program at Hallmark
golf course.

I can't tell you how important
it is for these Jr's to have a place
to practice and go on Saturday afternoon.
For three years I have been with
this program and I have seen so
much pleasure and improvement
with these Jr's and their parents.

The children are also taught
the importance of education, a good
attitude, and are continuously challenged
in all walks of life.

This program is very important
in the development of these fine Jr's. Don't
let them down.

Sincerely yours
Mr. Dick Stubb
Instructor

Date: 3-16-94

Mr. Roger Golden
U.S. Army Corps of Engineers
Environmental Branch
211 Main Street
San Francisco, Ca. 94105

Dear Sir:

1 It has been brought to my attention that you have prepared a draft Environmental Impact Report (EIR) which has identified the Lew F. Galbraith Golf Course as the preferable location for the disposal of dredge materials for the Port of Oakland's 42 foot project. It is also my understanding that the draft EIR concludes that there will be no adverse impact to the community because subsidies will be provided for seniors and juniors at other golf courses in the vicinity to mitigate the loss of access to the Lew F. Galbraith Golf Course. Furthermore, it is my understanding that subsidies will apply only to the "residents" of Oakland.

This draft EIR conclusion is inaccurate for the following reason. According to the Lew F. Galbraith Golf Course operators, approximately 70,000 rounds of golf are played at the course each year. Of the approximately 70,000 rounds played each year, approximately 20,000 rounds are played by seniors. This means that approximately 50,000 rounds are played each year by non-seniors. Those 50,000 rounds, or 5/7 of the golf played at the course, has not been mitigated in the EIR.

For this reason, I do not believe that the EIR accurately assess the impact of the Port's 42 foot project to the community.

I am one of the participants in the approximately 50,000 rounds of golf, the impact to whom has not been accounted for in the EIR. I herewith request that you reassess the accuracy of the EIR for its impact to the community and then re-evaluate your conclusions for the appropriateness of the Lew F. Galbraith Golf Course as a disposal site for dredging spoils from the Port's 42 foot project.

Sincerely,

Signature Russel Baze

Printed Name RUSSEL BAZE

Address 1233 Hillsdale Bldg.
San Mateo, CA

Telephone Number 571-6837

Copies of the letter above were also submitted by the individuals listed below. Apologies are made for any misspellings of names or addresses due to illegible handwriting.

Adam Denter
3127 Ebano Drive
Walnut Creek, CA

Dennis I. Faris
1827 Bayberry Lane
Tracy, CA

Warren Garrison
1361 Glorietta
Orinda, CA

Grayson A. Graves
2115 Whelan Ave.
San Leandro, CA

Edward K. Jackson
18069 Center St.
Castro Valley, CA

Wilmer T. Bruce
11200 Elvesso St.
Oakland, CA

Leopold N. Orozco
2521 Grande Vista
Oakland, CA

Raymond Burk
2215 Rosedale Ave.
Oakland, CA

Robert S. McBride
980 High St.
Alameda, CA

Welique Hankins
83010 7th Ave.
Oakland, CA

Peter Anthony
5462 Proctor
Oakland, CA

Raymond A. Montgomery
1511 Highland Blvd.
Hayward, CA

Fred D. Alexander
P.O. Box 3121
Vallejo, CA

John Beserra
1216 Liberty St.
El Cerrito, CA

Gary Boulanger
2720 Marina Ave.
Livermore, CA

Agustin Meza
8603 Bandon Dr.
Dublin, CA

Luis Jaurequi
20064 Wisteria, #B
Castro Valley, CA

John Nommsen
2399 E. 14th St.
San Leandro, CA

K. W. Hilt
301 Perkins St., 106
Oakland, CA

Clemmie V. Johnson
3711 Malcolm Ave.
Oakland, CA

Gene T. Nagase
2436 Fillmore
San Francisco, CA

Gregory Love
268 Vernon St.
Oakland, CA

Steve Sherman
670 Barron Way
Hayward, CA

Richard Armstrong
410 W. Hillsdale
San Mateo, CA

Peter Savarese
853 Woodside Way, #238
San Mateo, CA

Nicholas Panneth
55 McCappin St.
San Francisco, CA

Ron Borg
23 N. Rochester St.
San Mateo, CA

Joe Griffin
[none given]

Michelle Barsotti
167 Marina Lakes Dr.
Richmond, CA

Ronald Catellona
25200 Santa Clara
[none given]

Ellis Davis
149 Bayside Ct.
[none given]

M.J. Levy
2134 Cipriani
Belmont, CA

Flavio H. Landavazo
P.O. Box 157
Fremont, CA

John Moretti
214 San Carlos
El Cerrito, CA

Kenneth Lins
47 St. James Pl.
Piedmont, CA

Melvin C. Gillette
1021 Cheryl Ann, #63
Hayward, CA

Steven Shum
2000 Miramar Ave.
San Leandro, CA

T. R. Blair
40 Coronado
San Carlos, CA

Joseph Ambrose
1041 Broadway
Alameda, CA

Andy Zaballos
382 Willow Ave.
Hayward, CA

Robert A. Forbes
1598 Maddox Dr.
Redwood City, CA

Ron Bray
22 Helix Ct.
San Ramon, CA

Tom M. Imagana
1717 Hillman Ave.
Belmont, CA

Kermit A. Kerr
14648 Acapulco Rd.
San Leandro, CA

Masaru Mizokuchi
311 Beach Rd.
Alameda, CA

Norman A. Cabral
942 Liberty St.
El Cerrito, CA

Kenneth Johnson
4 Croydon Cir.
Piedmont, CA

Kenneth Windholz
35228 Erving Ct.
Fremont, CA

Donald B. Miles, Jr.
P.O. Box 839
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Pro SHOP.

8/10/93

P E T I T I O N

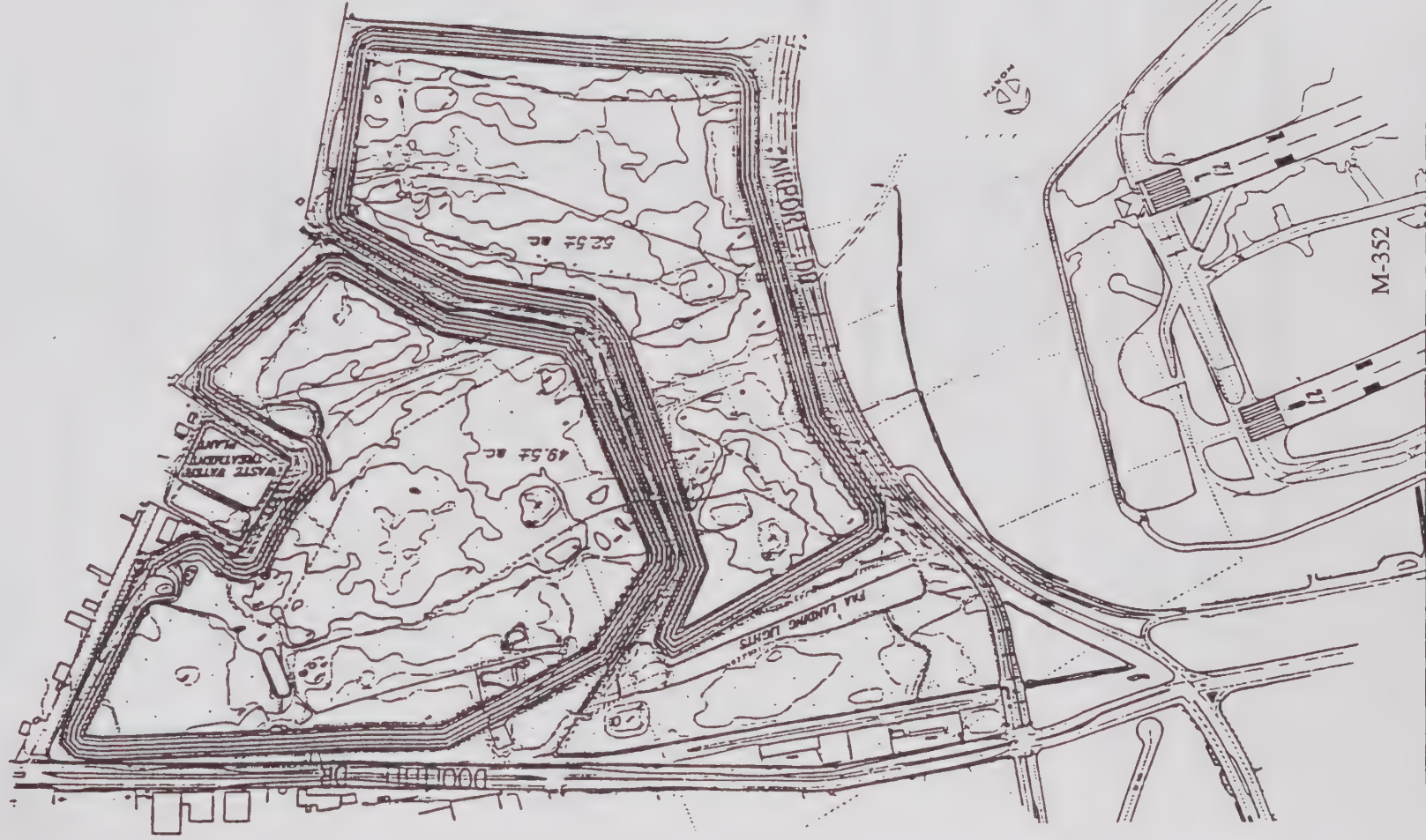
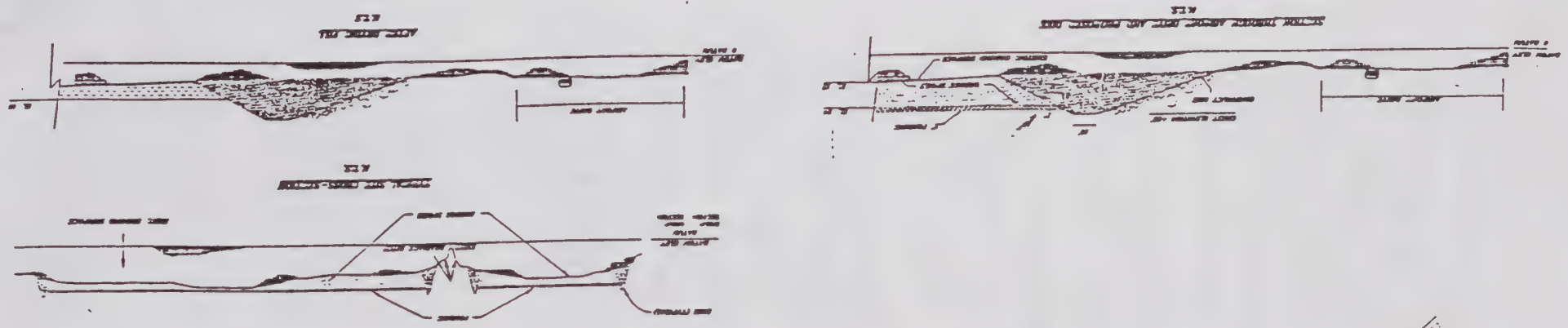
We, the undersigned oppose the closing of LEW F. GALBRAITH GOLF COURSE, Oakland, California by the PORT OF OAKLAND for the proposed disposal of Dredged Material.

1

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PORT OF OAKLAND

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AT THE LOW WATER OF SPRING TIDE
AT THE LOW WATER OF SPRING TIDE



NOTE: The preceding petition was one of 100 petitions, signed by approximately 2000 people, that were submitted to the lead agency. In the interest of saving space, a copy of only one petition has been included in the document.

APPENDIX N

Responses to Comments on the Draft SEIR/S

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RESPONSES TO COMMENTS ON THE DRAFT SUPPLEMENTAL EIR/S

Note: References below to DSEIR/S and FSEIR/S refer to the Draft Supplemental EIR/S and the Final Supplemental EIR/S, respectively.

Responses to Comments Made during the April 14, 1994 Public Hearing on the Draft SEIR/S

1. This comment notes that the Human Health Risk Assessment prepared for the project will pose an insignificant risk to public health and the environment. Comment noted.
2. This comment indicates support for the project. Comment noted.
3. This comment notes that the project will create new jobs. Comment noted.
4. Please refer to revised section 5.3.6.2 of the SEIR/S. On odor, see response to P&D Environmental comment #19.
5. The Port of Oakland is a non-operating port authority, that is, the Port does not operate the marine facilities with its own personnel. The Port acts as a landlord, creating the marine facilities, then leasing them to private companies specializing in those operations. The Port includes within any new lease, specific language that the lessee shall cooperate in implementing the goals of the Port's Employment Resources Development Program (ERDP). The lease also states, "Lessee understands the Port's ERDP seeks to address the needs of Port tenants for a qualified work force and the needs of Oakland's chronically unemployed and underemployed for employment . . ." ERDP acts as an employment service, targeting Oakland residents, screening applicants and providing referrals to Port tenants. The tenants provide ERDP with job opportunity notices.

Permanent employment positions will be developed by Port tenants and related businesses as cargo movement through the Port increases. It should be noted that 90 percent of container volume growth took place outside the Bay Area in the last ten years as the Port struggled to deepen the channels. Currently the Port of Oakland handles only 15 percent of the West Coast cargo flow. Following the channel deepening, the Port plans to increase its cargo base consistent with anticipated world trade growth, plus increased routing of the current cargo to the improved Oakland facilities. Without the 42-foot-deep channels, the Port of Oakland will not reach its potential.

The economic model utilized by the Port estimates that 1,700 new direct jobs will be associated with the proposed project and increases in shipping activity.

The simple answer to "where are the jobs?" is that the permanent jobs will follow the increased flow of cargo. Who will be hiring? - those companies handling the flow of goods. This includes dock labor, truck delivery labor (to both the local area and the local railroads for delivery out of the area), plus railroad, warehouse and office activity, repair facilities, and support services.

How does this create an opportunity for Oakland residents? Until 2 years ago, Port Affirmative Action and Equal Opportunity efforts were focused on increased ethnic minority hiring. In 1992 the City/Port Task Force emphasized the need to focus on Oakland resident employment. Today

36.6 percent of the Port's full time employees are Oakland residents, and the above mentioned ERDP provisions are included in Port tenant leases.

See section 4.7.3 on the socioeconomic impacts of the dredging on the City of Oakland. Also, see response to League of Women Voters comment #19.

6. See response to Hearing comment #5 regarding job creation.

7. To assess whether the proposal to place dredged materials from this project on the Galbraith Golf Course would adversely impact public health and safety, the Port retained consultants to prepare a human health risk assessment. The risk assessment reviewed the data showing the levels of contaminants in the dredged material, determined the ways that humans could be exposed to the material, and quantified the potential resulting health impacts. These health impacts were then compared to state and federal standards to determine whether the material would cause unacceptable elevated risks to human health. The risk assessment concluded that the Galbraith drying facility would not pose a human health risk above state and federal standards for residents, or golfers using the adjacent driving range. In addition, review of the sediment quality data shows that, with reasonable mitigation measures, the placement of the dredged sediments at Galbraith will not cause exceedances of applicable state and federal standards intended to protect the environment.

Thorough sampling and analysis of the dredged material from Berth 30 placed at the Pardee Drive site near Francesco's Restaurant showed that the levels of contaminants contained in the material did not exceed state and federal standards. The results of these tests were submitted to the Regional Water Quality Control Board and the staff reviewed the results before authorizing placement at this location. Due to the high salinity of this material, which was removed from the Bay, it is very difficult to seed it. Efforts are underway by the Port's Facilities Department to locate a more appropriate salt-tolerant species to use in the future at this site.

8. After the dredged material placed in the Galbraith facility dries, 1 to 2 feet of topsoil will be placed on top of it to facilitate revegetation before redeveloping the golf course. The impact of increasing the salinity of the groundwater underneath the site through leaching of the dredged material will be mitigated by the installation of a subsurface cutoff wall around the landfill. Additionally, the groundwater underneath Galbraith does not meet drinking water standards and therefore the potential increased salinity will not degrade a potential drinking water source. The facility design has changed from that proposed in the DSEIR/S, and the effluent water from the drying facility will no longer be discharged into the wetlands adjacent to Airport Drive. Instead, it will be discharged into vegetated areas to be constructed for this project and eventually into a drainage channel leading to the Bay. The drainage channel currently contains a mixture of water from the Bay and fresh water from upstream. Therefore, it will not be significantly degraded by the addition of water, originally from the Bay, which will be decanted off the drying facility site.

9. The proposed harbor deepening project which includes disposal at the Galbraith Golf Course represents economic development for the City of Oakland and the Bay Area. Without an upland disposal site for disposition of the dredged material, a significant opportunity for jobs and economic impact will be lost. The Port is very much concerned with the attractiveness of the waterfront area. An example of the Port's concern is reflected in the Port's involvement with

the City of Oakland's General Plan Congress that will plan the future of the waterfront area. Furthermore, the Port has agreed to incorporate elements of the Bay Trail within the Port area. Also, the Martin Luther King Park has been leased to the East Bay Regional Park District at a very low cost of \$1.00 per year to facilitate access to the shoreline.

10. This comment indicates support for the proposed project. Comment noted.

11. This comment indicates support for the proposed project. Comment noted.

12. This comment indicates support for the proposed project. Comment noted.

13. This comment indicates support for the proposed project. Comment noted.

14. This comment indicates that business, labor, and environmental groups have cooperated well in identifying suitable disposal sites. Comment noted.

15. Regarding odor, see response to P&D Environmental comment #19.

The Human Health Risk Assessment (HHRA) evaluated the dredged material and its possible effects on adults and children in the vicinity of the Galbraith Golf Course. The HHRA determined that the health effects to those living and working near the site will be below the agency target levels of concern (see section 4.9).

Although other disposal sites were considered and evaluated, the Galbraith site is the only one that is currently feasible (see response to Hearing comment #24).

16. See responses to Sierra Club comment #1.

17. See responses to Sierra Club comment #1.

18. See responses to Sierra Club comment #1.

19. This comment notes that the speaker has no comment on the project at this time but may wish to have questions later. Comment noted.

20. This comment indicates support for the proposed project. Comment noted.

21. On odor, see the response to P&D Environmental comment #19.

See the response to Oakland Office of Parks and Recreation comment #1 regarding dust impacts.

H.T. Harvey and Associates conducted a biological survey of the Galbraith site in 1993. There is no endangered vegetation present at the site (see section 3.4.3.6). The project impacts on plant and animal species are discussed in the SEIR/S and are not significant (see section 4.4.5.6).

On the burrowing owls, see the response to California Department of Fish and Game comment #7.

various sampling and testing programs have been planned by technical representatives and scientists from the Corps San Francisco District, United States Army Corps of Engineers Waterways Experiment Station, Environmental Protection Agency Region IX, the San Francisco Bay Regional Water Quality Control Board, and Battelle Marine Sciences Laboratory. Extensive evaluations for alternative disposal options including aquatic disposal, upland disposal, and wetland creation were conducted. Over the course of a six-year period, over 144 stations in the Inner and Outer Harbors have been sampled and evaluated with chemical and biological tests for determining suitability for the various disposal alternatives. The most recent sediment evaluations (Oakland Harbor 42-Foot Phase III A, 1990; Oakland Harbor 38-Foot, 1990; Oakland Harbor 42-Foot Phase III B, 1990; and Oakland Harbor Intensive Study, IC-1 and OC4-B, 1993) followed the most up-to-date guidance available including the Corps/EPA document titled *Ecological Evaluation of Proposed Discharge of Dredged Material into Ocean Waters* (draft, January 1990; final, February 1991) for evaluating aquatic disposal.

Oakland Harbor sediment sampling stations were derived from analyses of data obtained through testing of project sediments from prior sampling episodes, from survey of annual maintenance dredging sediment evaluations; from review of historical land uses in the vicinity of the Inner and Outer Harbors, from identification of NPDES discharges, storm drain outfalls, RCRA, CERCLA, RWQCB, and other abandoned sites; and from audit of information on past hazardous spills in the vicinity of the project. Sample stations were located to define the areal and vertical sediment quality of the Oakland sediments. A higher density of sampling stations were located in the most seriously contaminated sites, such as the Inner Turning Basin, while fewer but sufficient sampling stations were located in the channel areas away from known historical contamination. Where deemed appropriate, vertical stratification of sediment samples was conducted. This was conducted in the turning basin where the most contaminated sediments are present and in the areas that will require large vertical cuts. In the Inner Harbor Turning Basin, core samples were split vertically into an upper and lower sample on sediment cores SN2, SN3, OI-SS1, OISS2, OISS3, OISS4, OISS5, TD1, TD2, OI-TS1, OI-TS4, and OI-TS5. Also, at the entrance to the Inner Harbor where the channel will be widened, requiring up to a 12-foot cut in one reach, cores were visually inspected in the field and split at visually identifiable vertical strata. In the Outer Channel where no localized areas of high contamination were identified during earlier sampling episodes, and where no definitive vertical strata could be determined, sampling station cores were homogenized over the entire length of the core from mudline to project depth. In the Inner Harbor channel, sediment samples were vertically split into two vertical segments for testing. The first segment consisted of sediments between the existing 35-foot depth channel down to 38 feet, representing the 38-foot project; the second segment consisted of the sediments from 38 feet to 42 feet, representing the remaining sediments to be dredged during construction of the 42-foot project.

46. Comment noted. Impacts of the temporary closing of Galbraith Golf Course on Oakland resident youth and seniors will be mitigated; see response to City of Oakland, Office of Planning and Building comment #4. Impacts on other users of the golf course are not fully mitigable, and this is reflected in the SEIR/S as a significant unavoidable impact (see section 5.3.6.2).

47. See response to Hearing comment #5 and League of Women Voters comment #19.

- 1 48. This comment states that the closure of Galbraith Golf Course for 7 years will feel like a long
2 time. Comment noted.
3
4 49. The Port of Oakland will assist the Galbraith Golf Course employees with their job search with
5 the Employment Resources Development Program (ERDP). ERDP is a service provided by the
6 Port of Oakland to assist Port tenants with meeting their employment needs. This is
7 accomplished through recruiting and screening applicants prior to their referral to interviews with
8 the Port tenant.
9

10
11 Responses to Comments from Federal Agencies
12

13 **BRIAN O'NEILL, U.S. Department of the Interior, National Park Service, letter dated April 28,**
14 **1994.**
15

- 16 1. This comment reflects support for the selected plan and concurs with the decision to eliminate
17 the Alcatraz disposal site from further consideration. Comment noted.
18

19 **PATRICIA SANDERSON PORT, U.S. Department of the Interior, Office of Environmental Policy**
20 **and Compliance, letter dated May 5, 1994.**
21

- 22 1. The Galbraith site is the preferred upland option for disposal of dredged material from this
23 project, and therefore detailed design is only available for this alternative. The Galbraith drying
24 facility would consist of two ponds with earthen dikes. Sediment would be dredged from the
25 channel and brought near the disposal site on barges. Bay water would then be mixed with the
26 dredged material and the slurry placed in the ponds. The slurry would remain in the ponds for
27 an average of 14 days during which time the majority of the sediment would settle out. The
28 clarified water would then be decanted off the top of the settled sediment through weirs, or
29 structures designed to allow only the clear water to be discharged into one of two vegetative
30 control areas. The vegetative control area will slow down the flow of discharge water thereby
31 decreasing the total suspended solids contained in the discharge. The water will then enter a ditch
32 that leads to the Bay. Authorization of this disposal facility by the Regional Water Quality
33 Control Board will include a requirement that the Port obtain samples from the discharge water
34 and analyze them to confirm that the discharge will not exceed applicable regulatory standards.
35 The facility operators will be able to prevent discharge of decant water from the site if the
36 effluent contains levels of contaminants that exceed the water quality standards in the Port's
37 discharge permit. If necessary, placement of dredged material in the ponds can be slowed to
38 allow for more sediment settling time or treatment of the decant water by the two vegetative
39 control areas.
40

41 The proposed Galbraith drying facility will be located on a former landfill. To ensure that the
42 placement of dredged materials over the landfill does not cause the lateral migration of
43 contaminants contained in the landfill's fluid, a subsurface cutoff wall will be installed around
44 the perimeter of the site. The cutoff wall will be a low-permeability clay structure perpendicular
45 to the surface that extends into the bay mud layer underneath the landfill and up into the dikes
46 above the surface surrounding the drying ponds. The clay will minimize flow of fluids from the
47 landfill, and hold contaminants within the landfill. A groundwater monitoring system will be

1 installed so that data on the effectiveness of this cutoff wall can be provided to the Regional
2 Water Quality Control Board to confirm that the project is not causing the groundwater outside
3 the landfill to exceed water quality standards.
4

5 2. The rationale for not using the chromium sediment screening criteria in evaluating sediment
6 acceptability for placement at Sonoma Baylands is presented in section 4.2.7.5 of the FSEIR/S.
7

8 3. The intent of the this section was to show how the various test results were used to determine
9 sediment suitable for cover and non-cover material for wetland restoration/creation. The second
10 sentence of the third paragraph has been corrected as follows:
11

12 "However, since these tests were conducted, it has been determined that only material that has
13 been found suitable for wetland cover and unconfined ocean disposal will be proposed for wetland
14 cover material."
15

16 4. Both cutterhead and clamshell methods of dredging cause temporary increases in sediment
17 suspension during dredging operations. The temporary turbidity impacts associated with
18 cutterhead dredging are primarily in the lower water column and continuous. The temporary
19 turbidity impacts associated with clamshell dredging are intermittent (unlike cutterhead dredging)
20 and occur in the lower water column (usually to a lesser extent than cutterhead dredging) as well
21 as the upper water column from sediment being washed from the bucket as it is raised through
22 the water column. For either method of dredging Oakland Harbor, impacts from turbidity are
23 short term and insignificant. In order to ensure a competitive project construction bid "climate,"
24 the Corps has not restricted project construction to a particular method of dredging.
25

26 5. If migratory birds do come into contact with contaminants from the sediments, it would most
27 likely occur through dermal contact with the low concentrations of contaminant that could
28 solubilize into the runoff water. The majority of the contaminants are bound up in the sediment
29 clay/silt matrix and would only be available to a migrating bird through direct ingestion of the
30 contaminated sediment or through ingestion of benthic organisms that have themselves ingested
31 contaminated sediment. In general, the contaminants can only be taken up through ingestion
32 where stomach acid could allow the contaminant to become available for incorporation. Dermal
33 contact is not considered a significant pathway for uptake unless there are exposed receptor
34 organs, such as gill epithelia. It is therefore reasonable to assume that short duration dermal
35 exposures to migratory birds would be insignificant.
36

37 During the process of pumping the sediment to the disposal site, benthic organisms that may have
38 body burdens of contaminants may be available to foraging birds. Sensitive species such as terns,
39 plovers, or billed species are unlikely to forage or aggressively out-compete local gull species.
40 The potential for gulls to uptake contaminants is much higher in Class II or III landfills where
41 more contaminated soils from various sources are accepted. No concern or obvious
42 destabilization of gull populations have been noted near landfills (Contra Costa County, *Keller
43 Canyon Landfill Environmental Impact Report*, Draft 1989, Final 1990, State Clearinghouse
44 Number 91033042). The discharge of sediment with potential food items would be temporary,
45 localized, and consist of only material from the surface sediment layer where there is sufficient
46 oxygen for the benthic organisms to reside. Many other more typical food sources and foraging
47 areas exist in the general project vicinity. There is no reason to believe that large groups of

migratory birds would abandon other sources of food in preference for the dredged material discharge.

6. Aquatic Disposal. Over the course of a 6-year period, approximately 144 stations in the Oakland Inner and Outer Harbors have been sampled and evaluated during three separate phased testing programs (I,II, and III) in which chemical and biological tests were conducted. Decisions on sediments suitable for ocean disposal have been based on the results of both the acute toxicity tests and bioaccumulation studies. Sediment suitability decisions were based on Guidance provided in the Corps/EPA document titled *Ecological Evaluation of Proposed Discharge of Dredged Material into Ocean Waters* (draft, January 1990; final, February 1991) known as the "Green Book" and in the *General Decisionmaking Framework For Management of Dredged Material* (Lee et al. 1991). Based on Phase I and II evaluations, it was determined that sediments above the Merritt Sands in the north and south wings of the Inner Harbor turning basin were unsuitable for ocean disposal due to acute toxicity and bioaccumulation. Based on the results of the Phase III evaluations, it was determined that sediments represented by samples I-C10, I-C11, I-C12, I-C29, and I-C30 in the Inner Harbor channel along with sediments in the Inner Harbor Berths 38, 60, 61, 62, and 63 were unsuitable for ocean disposal due to bioaccumulation. It was determined that sediments represented by samples O-C4A and O-C4-B3 along with sediments in the Outer Harbor Berths 32, 33, and 34 were unsuitable for ocean disposal due to bioaccumulation. In addition, sediments I-C15, I-C16, I-C17, I-C18, and O-C1 were determined unsuitable for ocean disposal because of both acute toxicity and bioaccumulation. The remaining sediments in Oakland Harbor were determined suitable for unconfined aquatic disposal and were determined not to pose a significant risk to marine organisms through either bioaccumulation or acute toxicity.

Upland Disposal. The animals that currently live in the material to be dredged will eventually die during the dredging and drying process. The sediment will not be able to sustain marine benthic organisms because of the loss of water and the probability of the sediment becoming hypersaline. Typical terrestrial soil-dwelling organisms will not be able to exist in or on the drying sediment/soil because of the high salinity and general construction activity. Once the drying sediment is capped with topsoil, soil dwelling organisms will colonize the imported topsoil, but will avoid the project fill because of its depth and salinity.

In general, the contaminants of most concern can only be taken up by ingestion or constant contact with sensitive receptor organs, such as gill structures. Dermal contact with the contaminants cannot be considered a significant pathway for bioaccumulation. The major pathway for uptake into migratory and other species of concern would be through biomagnification through successive trophic levels. For the previously stated reasons (see response to comment #5 above) the probability and concerns are insignificant.

7. At no time in the dredging and dredged material disposal process will "overflow" of barges containing material unsuitable for unconfined aquatic disposal be allowed. For sediments suitable for aquatic disposal, "overflow" will be allowed only at the dredging site and only if needed to achieve an economical load. "Overflow" of barges containing material suitable for unconfined aquatic disposal will be limited to 15 minutes. Generally, "overflow" of barges being filled by a clamshell bucket is not needed to achieve an economical load while "overflow" of barges being filled hydraulically is needed to achieve an economical load.

Responses to Comments on the Draft SEIR/S

8. The California Department of Fish and Game, in their letter dated May 26, 1994 (see Figure N-1 on page N-11), has agreed to the Corps' request for a waiver to the Department's recommended windows on proposed dredging operations located in Pacific herring spawning areas. The Department's waiver requires the Corps and Port to commit to abiding by the following requirements during dredging of the Oakland Inner and Outer Harbor channels and berths between the December 1 and March 1 time period: (1) the presence on site of a qualified herring observer during all dredging operations, and (2) avoid dredging for approximately two weeks following observation and documentation of a herring spawn within 200 meters of the dredging site. The Corps and Port agree to abide by the requirements of the Department's waiver.
9. As discussed in section 4.4.4.1, the results of toxicity and bioaccumulation tests and other factors indicate that toxicity to and bioaccumulation in fish are not expected to be significant. Localized, temporary effects are possible, but these are not expected to be significant for the fish community overall, given the documented tendency of fish to avoid dredging activity. See also response #6 above.
10. The Corps will comply with the Environmental Protection Agency's site management/monitoring requirements for ocean disposal of dredged material and the Regional Water Quality Control Board's site management/monitoring requirements for disposal of dredged material at Sonoma Baylands. The complete mitigation monitoring and reporting plan for the entire project is presented in Appendix J. The Port will adopt this plan when it certifies the SEIR/S under CEQA.
11. The cumulative analysis presented in Chapter 10 is considered fully adequate. Regarding the examples raised, noise and other disturbance from dredging activity are expected to cause shorebirds to avoid the immediate dredging area, so that exposure to any toxicants will be minimized. Fish are likely to avoid areas of physical disturbance and high turbidity. This will cause temporary disturbance of individual fish, but long-lasting effects on these fish or the fish community overall are unlikely.
12. See response #11 above.
13. As the dredging of the Oakland Harbor channels and berths proceeds, those areas that contain material unsuitable for unconfined aquatic disposal will be dredged before the material suitable for unconfined aquatic disposal is dredged.
14. See response #8 above.
15. The Draft Coordination Act Report has provided specific compensation measures for the navigation improvement project. Also, the Coordination Act Reports provided previously during the feasibility study phases of the Oakland Inner Harbor and Oakland Outer Harbor projects did not require compensation for impacts at the dredge site. Construction of the Oakland Harbor project was authorized without compensation. Any land acquisition required for compensation would necessitate a post-authorization report and additional congressional action.

DEPARTMENT OF FISH AND GAME

1416 NINTH STREET
P.O. BOX 944209
SACRAMENTO, CA 94244-2090



May 26, 1994

Lt. Colonel Leonard E. Cardoza
District Engineer
San Francisco District
U.S. Army Corps of Engineers
211 Main Street
San Francisco, California 94105

Dear Colonel Cardoza:

The Department of Fish and Game (DFG) is responding to the U.S. Army Corps of Engineers' request for the DFG to consider granting a waiver to our recommended windows on dredging operations proposed for Pacific herring spawning areas. The waiver request, as we understand it, is intended to apply exclusively to the Corps' and Port of Oakland's joint Oakland Harbor Navigational Improvements Project (also known as the 42-foot project).

The DFG routinely recommends that all dredging projects which are proposed for areas of historical Pacific herring spawning (e.g., Oakland Inner and Outer Harbors) be precluded from taking place during the period of peak spawning activity, December 1 to March 1, because of potential adverse impacts to eggs and early larval forms of this species from suspended dredged material in the water column. We have previously provided your agency with a full explanation of our position and specific conditions which would allow some permitted projects to continue construction into the month of December when necessary. (See DFG letter to Mr. Calvin Fong dated September 22, 1993). Recommended requirements on December dredging include the presence of a qualified herring observer on-site during all dredging operations and the avoidance of dredging for approximately 2 weeks following observation and documentation of a herring spawn within 200 meters of the dredging site.

The DFG continues to maintain that the seasonal window for Pacific herring is critically important for the protection and conservation of this commercially and recreationally valuable species. However, we are also aware that the overall design of the 42-foot project includes minimal impacts to fish and wildlife and provides substantial resource habitat benefits through the creation of 322 acres of tidal marsh at Sonoma Baylands. Additionally, it appears that, in order to maximize these benefits through efficient timing of project construction, it will be necessary to conduct dredging operations on a continuous 24-month schedule.

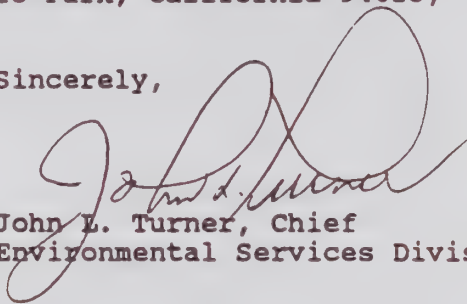
Figure N-1
(Page 1 of 2)

DEPARTMENT OF FISH AND GAME LETTER DATED MAY 26, 1994,
ADDRESSING HERRING SPAWNING IN THE VICINITY OF DREDGING OPERATIONS

Lt. Colonel Leonard E. Cardoza
May 26, 1994
Page Two

Taking these unique circumstances into consideration, the DFG is willing to accept a waiver as requested for this project provided that the Corps and the Port commit to abiding by the conditions for December dredging as previously outlined in the DFG letter to Mr. Calvin Fong. We intend to evaluate the project prior to completion based upon how successful these conditions are during the 1994-95 herring season. The DFG would be pleased to discuss with the Corps and the Port the development of further details for the protection of Pacific herring. For discussion, please contact Mr. Robert N. Tasto, Environmental Specialist, California Department of Fish and Game, Marine Resources Laboratory, 411 Burgess Drive, Menlo Park, California 94025, telephone (415) 688-6360.

Sincerely,



John L. Turner, Chief
Environmental Services Division

cc: Mr. James McGrath
Port of Oakland
Oakland, California

Mr. Marc Del Piero
State Water Resources Control Board
Sacramento, California

Honorable Douglas P. Wheeler
Resources Agency
Sacramento, California

Mr. Robert N. Tasto
Department of Fish and Game
Menlo Park, California

Figure N-1
(Page 2 of 2)

DEPARTMENT OF FISH AND GAME LETTER DATED MAY 26, 1994,
ADDRESSING HERRING SPAWNING IN THE VICINITY OF DREDGING OPERATIONS

Channel improvements at Oakland Harbor will result in the deepening of approximately 4 acres of shallow sub-tidal habitat (defined as habitat at elevations of less than -20 feet MLLW). Based upon the Draft Coordination Act Report of February 14, 1994, either the establishment of shallow water habitat (33 acres), artificial reefs (33 acres), or wetland habitat (17 acres) were recommended for compensation. Conditions for creating shallow water habitat in San Francisco Bay are constrained by the "no fill" policy of the San Francisco Bay Conservation and Development Commission *Bay Plan*. Construction of an artificial reef in near coastal waters is possible, although water depths may result in the replacement of "out-of-kind" values. Also, although an "out-of-kind" replacement, establishing wetland habitat is assigned a higher value but such mitigation land requirements would require additional congressional authority (in addition, see response #15 above).

The Oakland Harbor Project, as proposed, will provide for the placement of suitable dredged material at the Sonoma Baylands wetlands restoration site, which will facilitate the restoration of 289 acres of tidal wetlands. Although the wetland restoration at Sonoma Baylands is a specifically authorized project (Section 106, WRDA 1992), the transport of dredged material from the Oakland Project represents a significant investment by the federal government and its non-federal cost-sharing partner, the Port of Oakland. In this project, the placement of dredged material from Oakland Harbor at Sonoma Baylands to restore tidal wetlands would in part create substantial wetland and shallow sub-tidal habitat values that would minimize any potential losses of shallow subtidal habitat values at Oakland Harbor.

16. See response #15 above.

17. Construction work on the bayfront levee and placement or removal of pipeline during the California clapper rail nesting season will be avoided, unless surveys by a qualified biologist indicate that clapper rails are not nesting within 500 feet of the construction area. Pipeline placement across the tidal wetlands will be restricted to the existing berm southwest of the pipeline site. The levee will not be breached during the California clapper rail nesting season, unless surveys by a qualified biologist indicate that clapper rails are not occupying areas that will be substantially affected by the alteration of tidal influence.

18. Marking of the existing powerlines to increase their visibility would eliminate an existing hazard to waterfowl and raptors, rather than any condition created by the proposed wetland restoration project. According to the Service's HEP analysis, the proposed restoration project will decrease the use of the site by waterfowl and raptors. Therefore, the restoration project would be expected to result in reduced mortality and injuries to waterfowl and raptors, even if the powerlines are not marked. Although the Corps does not believe that the project will result in reduced use of the site by waterfowl, the marking of the powerlines is considered a separate enhancement measure and is not proposed as part of the Sonoma Baylands Wetlands Demonstration Project (Section 106 WRDA).

19. Although the comment does not specify the toxic threshold established by the Fish and Wildlife Service, it is presumed the Service comment refers to wetland cover sediments that have mercury concentrations less than the rail reproductive toxic threshold of 0.2.mg/kg (dry weight), rather than the Regional Water Quality Control Board's existing screening criteria of 0.35 mg/kg. The response to this comment is contained in Appendix H, page 9, item 2.f.

Responses to Comments on the Draft SEIR/S

20. See response #6 above.
21. See response to Department of the Interior comment #1. During the design process for the Galbraith drying facility, a liner for the site was considered. However, a liner would not adequately address the potential groundwater impact from placing dredged materials at the site. Although it would minimize the release of contaminants from the dredged material into the groundwater within the landfill, a liner would not minimize the potential for lateral migration of liquid already contained in the underlying landfill. Therefore, a liner was rejected and a cutoff wall is now planned to mitigate the potential for low levels of contaminants from the dredged material and the landfill to impact groundwater off site.
22. There will be about 1 to 2 feet of topsoil placed on top of the dried dredged material before the golf course is redeveloped. The site will be graded to facilitate drainage and prevent ponding.
23. Should alternative dredged material disposal sites that are not currently included as part of the recommended plan (see Appendix H) become included as part of the recommended plan, then the Corps will consider the Service's Coordination Act Report specific comments.
24. See response to Golden Gate Audubon Society comment #24.
25. See response to Golden Gate Audubon Society comment #24.
26. There are no detailed design plans available for the Leonard Ranch alternative since it is not the preferred alternative for this project. If this alternative becomes a viable option in the future, detailed design plans would have to address issues associated with the appropriate drainage of stormwater runoff from the Leonard Ranch site. The Regional Water Quality Control Board would have to authorize the proposed drainage path from the Leonard Ranch site, and would therefore require that applicable regulatory standards be met before surface water runoff is discharged from the drying facility. See also response to Golden Gate Audubon Society comment #24.
27. See response to Golden Gate Audubon Society comment #24.
28. See response to Department of the Interior comment #26.
29. See response to Department of the Interior comment #1.
30. See response to Department of the Interior comment #1. The design for the Galbraith drying facility has been revised so that the water decanted from the drying ponds will no longer be routed through wetlands along Airport Drive. See revised Figure 2.7.6-1 for the discharge routing plan. Section 4.2.7.6 of the FSEIR/S (Impacts on Surface Water) describes the results of tests designed to assess the quality of the decant water. In addition, see the revised Table 4.2.7.6-7 in this document. The Regional Water Quality Control Board must issue Waste Discharge Requirements as well as a National Pollutant Discharge Elimination System permit, which will contain standards for the discharge of effluent from the site and a monitoring program to confirm that the effluent will meet those standards.

31. See response #3 above.
32. Comment noted. For reasons stated in section 7 of the FSEIR/S, the Montezuma Wetlands alternative disposal site is not part of the Oakland Harbor Project recommended plan.
33. See response to #32 above.
34. See response to #32 above.

DAVID FARREL, U.S. Environmental Protection Agency (EPA), letter dated May 2, 1994.

1. This comment indicates support for the preferred alternative. Comment noted.
2. The various disposal alternatives are compared in section 6 of the SEIR/S. In that section, Table 6-1 compares the environmental impacts of each of the 8 disposal sites, while Table 6-2 compares the environmental impacts of the 12 disposal alternatives, including the No-Action Alternative.
3. This comment addresses generally what is more specifically addressed in EPA comments #25 and #26. See the response to comments #25 and #26.
4. As suggested, section 2.2.2 has been modified to note that future maintenance dredging could be regulated under the Marine Protection, Research, and Sanctuaries Act to the extent that the LTMS Management Plan directs disposal of such material to the ocean site instead of in-Bay sites.
5. The Corps agrees with EPA's assertion that biological data, such as provided by the WES experiments with Oakland Harbor sediments, is a more realistic measure of potential effects of dredged material for wetland restoration than the RWQCB interim sediment screening criteria. In fact, the Corps provided considerable comment regarding the RWQCB screening criteria during a public hearing regarding this subject on 21 Oct 1992 (see Dick Lee comments and memorandum, last two pages of Appendix K). However, reasons for using the screening criteria are twofold: (1) it is being required by the RWQCB; and (2) the WES data represent results on two large composites, one for the Oakland Inner Harbor, and a second for the Oakland Outer Harbor, which does not now reflect the sediments being proposed for wetland creation. Unfortunately, the two WES composites were developed a few years before the Corps knew the disposal plan as it currently exists for the Oakland Harbor project sediments (i.e., separating more contaminated sediments for upland disposal, and cleaner sediments for ocean disposal and wetland creation). At the time of the WES wetland study with Oakland Harbor sediments, it was not known how the Oakland Harbor sediments would be broken up, and due to the large costs and extensive time required in conducting the WES wetland studies (over \$500,000 per composite), only two large composites were used. Although the Corps does not fully agree with the screening criteria, it does provide a more cost effective tool to evaluate sediments. The allowable contaminant levels of the screening criteria are sufficiently low, and in some instances may be too restrictive. In the future, sediments not meeting the screening criteria can be evaluated through the WES method to determine whether there is an actual environmental concern for using the sediments in a wetland restoration project. Currently, higher resolution testing (i.e., more composites) with the WES method is prohibitively expensive.

Responses to Comments on the Draft SEIR/S

6. Additional information on the disposal capacity of Cargill West Wetlands has been incorporated into the document in section 2.6.2.1. Also, if the Cargill West Wetlands were used for dredged material disposal (not wetland restoration) as the comment suggests, the impacts on wetland would require mitigation.
7. The requested text change has been made.
8. As suggested, section 2.7.2 on the Alcatraz site has been modified to reflect that many other projects compete for the available in-Bay disposal capacity at this site.
9. The requested text change has been made.
10. The two references noted have been added to the list of key references in the SEIR/S.
11. All the listed references have been provided to EPA under separate cover.
12. Evaluation of confined aquatic disposal (CAD) sites has been incorporated into the LTMS process as of May 1994.
13. Summary table concentrations are simple means of the Appendix A data points. A footnote has been added to the table for clarification.
14. See response #10 above.
15. Regarding the issue of odor at Galbraith, see response to P&D Environmental comment #19. On the issue of dust, see response to City of Oakland Office of Parks and Recreation comment #1.
16. On the issue of dust and health risks, see response to City of Oakland Office of Parks and Recreation letter dated May 2, 1994, comment #1. The Human Health Risk Assessment concluded that the proposed activities at Galbraith Golf Course would meet annual federal (NAAQS) and state (CAAQS) standards for PM₁₀ (dust-in-air) for all receptors evaluated. Because these PM₁₀ standards are designed to be protective of the most sensitive individuals in a given population, an analysis of the prevalence of high respiratory or lung problems within the nearby community is not necessary.
17. On odors, see response to P&D Environmental comment #19 and revised section 4.1.2.2.
18. This comment indicates agreement that undisturbed Merritt sand formations are suitable for ocean disposal provided that the mitigation measures listed in section 4.2.6.2 are fully implemented. Comment noted.
19. At no time in the dredging and dredged material disposal process will "overflow" of barges containing material unsuitable for unconfined aquatic disposal be allowed. For sediments suitable for aquatic disposal, overflow will be allowed only at the dredging site and only if needed to achieve an economical load. Overflow of barges containing material suitable for unconfined aquatic disposal will be limited to 15 minutes. Generally, overflow of barges being filled by a clamshell bucket is not needed to achieve an economical load while overflow of barges being

filled hydraulically is needed to achieve an economical load. Also, see the California State Water Resources Control Board DSEIR/S comment letter dated May 2, 1994, page 8, item 4.2-22/9, which states: "Note that the Corps has agreed to limit barge overflow to 15 minutes. This time limit is standard procedure for all San Francisco Corps of Engineers maintenance dredging projects using hopper dredges." No overflow or spillage from barges in transit to a disposal site will be allowed.

20. Comment noted. The Bay Farm Borrow Area (BFBA) confined aquatic disposal (CAD) alternative is not part of the selected plan. The Corps continues to collect environmental data from the BFBA to evaluate its potential future use as a CAD site. Special provisions to its use under the CAD scenario (i.e., appropriate mitigation measures and monitoring requirements) will be addressed under the LTMS program.
21. The containment system proposed for the Galbraith drying facility will consist of a subsurface cutoff wall that extends down into the bay mud layer underneath the landfill and up into the dikes that surround the drying ponds. The low permeability clay cutoff wall will be about 2 feet thick, and will conform to the standards for subsurface barriers set forth in Title 23 of the California Code of Regulations Chapter 15, Section 2545. The purpose of installing the cutoff wall is to reduce water quality impacts to below applicable water quality standards. A groundwater monitoring system will be installed so that data on the effectiveness of this cutoff wall can be provided to the Regional Water Quality Control Board to confirm that the project is not causing off-site groundwater to exceed applicable water quality standards. If groundwater quality monitoring outside the drying facility shows that the cutoff wall is not contributing to the maintenance of applicable water quality standards, the RWQCB will require the Port to implement a contingency plan to correct the cause of the water quality exceedances. The contingency plan will be submitted to the RWQCB by the Port as part of the Report of Waste Discharge for the project. The plan will address the potential causes of water quality exceedances, such as an increase in groundwater pressure within the landfill, and it will contain proposed alternative corrective measures.
22. The first paragraph of the Mitigation Measures section has been changed to emphasize provisions that ensure dredged materials are not released in transit or outside of a circular target disposal zone. The proposed Site Management and Monitoring Plan (SMMP) has been reviewed and disposal constraints listed in the proposed SMMP have been incorporated.
23. The referenced table has been corrected.
24. The text has been revised to incorporate this comment.
25. The SEIR/S now contains a section (2.9.2.16) that addresses Executive Order 12898.
26. An expanded discussion of the social environment at Galbraith Golf Course has been added to the text. The analysis has also been revised to conclude that the loss of the Galbraith Golf Course would result in significant, unmitigable recreational impacts due to capacity constraints at other nearby golf courses. See section 5.3.6 for both changes.

Responses to Comments on the Draft SEIR/S

- 1 27. The conclusions presented in the SEIR/S on the Human Health Risk Assessment (HHRA) reflect
2 the final assessment of this issue. A copy of the HHRA has been provided to the EPA under
3 separate cover.
4
- 5 28. The dried dredged material will be covered with 1-2 feet of topsoil and possibly some of the
6 material imported to build the dredged material containment levees. (The traffic impacts from
7 importation of this material are evaluated in the SEIR/S.) The slightly elevated health risks
8 estimated by the human health risk assessment for the dredged sediment worker will be within
9 California's and EPA's target levels with the standard hygiene and safety practices that will be
10 implemented.
11
- 12 29. The parenthetical phrase in question has been deleted. The conclusions presented in the SEIR/S
13 are final and reflect the conclusions of the Human Health Risk Assessment (HLA 1994a).
14
- 15 30. This comment addresses the comparison of alternatives in the SEIR/S. See response to EPA
16 comment #2 above.
17
- 18 31. Comment noted and is incorporated by reference into the FSEIR/S.
19
- 20 32. Comment noted and is incorporated by reference into the FSEIR/S.
21
- 22 33. Additional analyses demonstrate that the navigational improvements provided by the project
23 would produce less cargo ship emissions than a no-action scenario beyond the year 2007, even
24 though cargo throughput would increase during this time period. A quantification of this analysis
25 is provided in section 4.1.2.3 of the FSEIR/S. However, emissions from land-based sources that
26 handle cargo would increase in future years, as cargo throughput increases. A quantification of
27 this analysis is provided in section 4.1.3.1 of the FSEIR/S. These impacts are less than
28 significant. These are the only reasonable air quality impacts expected from the increase in cargo
29 volume and ship traffic related to the project.
30
- 31 34. The referenced text has been revised.
32
- 33 35. Comment noted. For reasons stated in section 7 of the FSEIR/S, the Bay Farm Borrow Area
34 disposal site is not part of the Oakland Harbor Project recommended plan.
35
- 36 36. The text has been revised to incorporate this comment.
37
- 38 37. The text has been revised to incorporate this comment.
39
- 40 38. The text has been revised to incorporate this comment.
41
- 42 39. The text has been revised to incorporate this comment.
43
- 44 40. The text has been revised to incorporate this comment.
45
- 46 41. The text has been revised to incorporate this comment.
47

Responses to Comments on the Draft SEIR/S

42. Comment noted. The sentence does only refer to the levees at the site. The sentence has been clarified.
 43. Comment noted. Additional discussion regarding mitigation for shallow water habitat is provided in response #16 to the U.S. Department of the Interior letter dated May 5, 1994.
 44. Comment noted and is incorporated by reference into this FSEIR/S.
 45. This comment notes that the EPA is not submitting specific comments on the Draft Coordination Act Report's recommendation for separate compensatory mitigation as part of implementation of the Sonoma Baylands project because EPA anticipates changes in the FSEIR/S in this regard. Comment noted.
 46. See response to EPA comment #28.
- GARY MATLOCK, U.S. Department of Commerce, NOAA, National Marine Fisheries Service, letter dated April 20, 1994.**
1. This comment indicates support for the environmentally preferred alternative B2. Comment noted.
- REAR ADMIRAL J. AUSTIN YEAGER, U.S. Department of Commerce, NOAA, National Ocean Service, letter dated April 22, 1994.**
1. The Corps will provide the NOS with all "after-completion" dredging project blueprints upon completion of the project.

Responses to Comments from State Agencies

JAIME MICHAELS, San Francisco Bay Conservation and Development Commission (BCDC), letter dated May 2, 1994.

1. Comment noted.
2. This comment indicates support for the preferred disposal alternative B2. Comment noted.
3. The recommended text changes have been made to sections 2.9.2.4 and 2.9.3.
4. The entirety of the Galbraith site is not included within BCDC jurisdiction. BCDC jurisdiction "ends at the first set of culverts separating the drainage channel from the inlet of the Bay between the golf course/sewage treatment plant area and the former Davis Street sanitary landfill in San Leandro" (McAdam 1994). Section 2.9.5 has been modified accordingly.
5. BCDC jurisdiction extends 100 feet landward from the line of highest tidal action on the outboard levee at the Sonoma Baylands site. This action will be addressed in the Corps of Engineers'

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Determination of Consistency with the California Coastal Management Plan. As noted in response #4 above, none of the Galbraith site is within BCDC jurisdiction.

6. See response to BCDC comment #4.

7. See response to BCDC comment #4. Also, the project design has been modified so that the tidal wetland would not be affected.

8. Section 5.3.6.1 has been modified accordingly.

9. The Port will be responsible for deepening eight berths in the Inner and Outer Harbors to -42 feet (with allowable overdepth), although the actual dredging may be conducted by the Corps' contractor. The berth dimensions are listed below. The Port will seek a BCDC permit to cover this work in BCDC jurisdiction. The berth deepening is included in the overall project description (section 2.2.1), and is included in the environmental analysis.

Berths to be Deepened

<i>Berth Number</i>	<i>Berth Length (ft.)</i>	<i>Berth Width (ft.)</i>	<i>Berth Area (sq. ft.)</i>	<i>Existing Permitted Depth (ft.)</i>	<i>Proposed Depth (ft.)¹</i>	<i>Proposed Volume (cy)²</i>
25	860	125	107,500	-38	-42	18,000
32	965	125	120,625	-38	-42	[berths 32&33: 85,000] ³
33	883	125	110,375	-38	-42	
38	862	125	107,750	-40	-42	9,000
60	718	125	89,750	-38	-42	[berths 60-63: 80,000
61	725	125	90,625	-38	-42	
62	637	125	79,625	-40	-42	_____] ³
63	663	125	82,875	-40	-42	
Total						192,000
Notes: 1. Plus allowable overdepth. 2. Includes 100 percent of 2-foot overdepth. 3. Brackets indicate that the volumes shown are for multiple berths.						

10. The Corps has prepared and submitted a Consistency Determination to BCDC that not only includes disposal of dredged material at the Sonoma Baylands site as part of the tidal restoration but also includes other activities with potential water quality impacts.

11. As suggested, the SEIR/S has been revised to reflect that the proposed deepening project's use of the Alcatraz disposal site would be inconsistent with the Bay Plan.

12. The alternative Bay Farm Borrow Area dredged material disposal site has been eliminated from further consideration for reasons as stated in the comment, as well as reasons stated in the EPA's comment letter (see comment #35) and in section 7 of the FSEIR/S.

13. See response #8 to U.S. Department of the Interior, Office of Environmental Policy and Compliance letter, dated May 5, 1994.
14. Sections 2.9.2.4 and 5.0 of the FSEIR/S discuss the consistency of the Oakland Harbor deepening project with the BCDC's laws and regulations.
15. The level of detail for the proposed project's construction plans and specifications, which locate and define the "...minimal amounts of temporary fill to off-load dredged material. . . ." at the Sonoma Baylands and Galbraith non-tidal sites, is currently being developed. It is envisioned that dredged material off-loading facilities at each disposal site would consist of a spud-anchored, flat-top barge of a size necessary to support all equipment required to off-load the barge containing the dredged material. Also, temporary structures to support the dredged material discharge pipeline may be necessary at each disposal site. All dredged material off-loading facilities would be temporary and would be removed upon project completion.
16. Comment noted. Current meter data at the BFBA were augmented by more recent information collected in 1993. The conclusions relative to impacts, however, are the same. It is important to note that the BFBA is not part of the Selected Plan and that the Corps continues to collect environmental information from the site. Also, see response to #12 above.
17. The source for the following response is *Final Demonstration Project Report and Environmental Assessment for the Sonoma Baylands Wetland Demonstration Project*, dated April 1994, San Francisco District, U.S. Army Corps of Engineers:
- Section 106 WRDA '92 specifies that the final phase of the Sonoma Baylands Wetlands Demonstration Project will include monitoring. The monitoring costs will be shared between the Corps of Engineers and the Coastal Conservancy as a project cost. The federal share of the monitoring program costs will be funded under the Section 106 WRDA '92 authority through annual Operation and Maintenance appropriations. Funding for completion of the monitoring plan is included in the Engineering During Construction portion of the Planning, Engineering, and Design costs of the estimated project costs. The Sonoma Baylands monitoring plan will include evaluation of the following wetland attributes: hydrology, topography, water quality, contaminant mobility, soils, and biota. The degree to which each element is monitored will depend on the importance of data on each attribute.
- The LTMS Reuse/Nonaquatic studies workgroup has been tasked to produce a model monitoring program for future wetlands restoration. The Sonoma Baylands site has been selected as the design site for the model program. The LTMS workgroup tasking states, "The program for the [Sonoma Baylands] site will be designed to monitor 1) site colonization by tidal marsh vegetation and benthic organisms; 2) use by fish and wildlife, with a focus on threatened and endangered species; 3) critical physical determinants of habitat success, including fill elevations, evolution of tidal drainage systems and hydroperiods, rates of natural sedimentation, rates of erosion, and material consolidation/site subsidence; 4) chemical changes; and 5) contaminant transport through local organisms and food-chains over time." The final monitoring plan will include both physical and biological success criteria and will be completed prior to the restoration of tidal action to the pilot unit. Monitoring of the project will be performed until all of the success criteria in the

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1 monitoring plan have been met, or until the Corps and Conservancy mutually agree that
2 monitoring is no longer required. The monitoring period is estimated to be 20 years.

3
4 With respect to remediation, Section 106 WRDA '92 includes "remediation if necessary" as part
5 of the final phase of the Sonoma Baylands Wetland Demonstration Project. At this time, no need
6 for remediation is anticipated. The need for remediation will be determined by periodically
7 comparing the results of the monitoring program to the success criteria for physical functions in
8 the monitoring plan. Remediation would be limited to instances in which corrective actions are
9 needed in order for the project to fulfill the success criteria for physical functions. If the
10 monitoring results indicate a need for remediation, a study would be conducted to determine the
11 appropriate corrective actions. Any such corrective actions would be coordinated with the
12 appropriate federal, state, local agencies. Remediation studies and actions would be funded
13 under, and cost shared in accordance with, Section 106 WRDA '92.

14
15 18. See response to BCDC comment #4.

16
17 19. As suggested, the estimated disposal capacity of Cargill West Wetlands (referred to as Cargill
18 evaporator salt ponds in the comment) and Skaggs Island has been added to the text of section
19 2.6.

20
21 20. This comment notes that the proposed disposal alternative includes acceptable alternatives to
22 restoration sites that were not pursued. Comment noted.

23
24 21. As suggested, the text of section 2.6.2.1 on Cargill West Wetlands (referred to as Cargill west-
25 side [evaporator] salt ponds) has been modified to reflect that a sale agreement for this site was
26 approved in February 1994 so that this property may become public in the near future.

27
28 22. Gahagan and Bryant's estimate for drying time is based on slurried dredged material, which has
29 a much higher water content than the Ninth Avenue dredged material because it has to be slurried
30 and pumped to the sites. In the case of the Ninth Avenue Terminal, the dredged material will
31 be clamshelled directly onto the site from the barge after it is dredged from the channel. No
32 water has to be added to the dredged material to transport it to the Ninth Avenue site, therefore
33 it has a lower water content and will dry faster than the dredged material in Gahagan and
34 Bryant's report. The Port's recent experience with Berth 30 dredged material supports the 3-
35 month drying time. The Berth 30 dredged material was placed directly on a land site and within
36 three weeks it was dry enough to transport.

37
38 **VINCENT PAUL, California Integrated Waste Management Board (CIWMB), letter dated May 2,**
39 **1994.**

40
41 1. The SEIR/S is not prepared as a master EIR. All of the various components of the project
42 (dredging, transportation of dredged material, dredged material drying, reconstruction of the golf
43 course etc.) are evaluated in entirety in this document. Unless there are substantial changes in
44 the proposed project or conditions as outlined in CEQA Guidelines Section 15162, supplemental
45 environmental documentation will not be prepared for this project.

46
47 2. Comment noted.

3. This comment states that the Integrated Waste Management Board (IWMB) and the Local Enforcement Agency (LEA) jointly monitor disposal operations at landfills to protect public health and safety and the environment. Comment noted. The comment also states that the Marin County Environmental Health Department, Solid Waste LEA for the Redwood Landfill should be provided information related to ongoing leaching tests at Redwood Landfill (noted in the SEIR/S) when it is available from the RWQCB. Marin County should contact the RWQCB for this information when it becomes available. Note that disposal at the Redwood Landfill is not part of the proposed project.
4. The three landfills evaluated in the SEIR/S have indicated that acceptance of sediments to be dried at the Ninth Avenue Terminal is consistent with their existing operating permits and environmental review. This SEIR/S has evaluated the impact of drying and transporting the material to each landfill, and has determined that those impacts are not significant.
5. The Port of Oakland will submit, if necessary, construction plans to the Local Enforcement Agency for review in accordance with Title 14 of the California Code of Regulations Section 17796.

Port staff has been working closely with Regional Water Quality Control Board (RWQCB) staff in formulating the design for the Galbraith dredged material drying facility to ensure that the environmental impacts associated with the project are minimized. The RWQCB is regulating the placement of dredged material at Galbraith under Title 23 of the California Code of Regulations Chapter 15. Under these regulations, the Port's application to the RWQCB must include geotechnical information and plans that show the design mitigates for potential differential settlement and seismic impacts. There are no existing landfill monitoring or control features at Galbraith. Since the landfill consists of mostly construction debris and no landfill gases have been detected during the site's subsurface investigations, no control system has been installed or proposed. However, additional environmental control features are planned, such as a subsurface landfill containment wall and groundwater monitoring wells, which will be installed to confirm that the containment wall is effectively preventing the movement of contaminants off site.
6. Port of Oakland staff has contacted the Alameda County Local Enforcement Agency (LEA) and will send project plans for upland disposal to them for their review. In addition, the Port will notify the LEA of the construction schedule and operations plans for the site so that they can perform inspections.
7. The permits required for implementation of the selected project are listed in section 2.9.5 of the SEIR/S. This SEIR/S evaluates the potentially feasible dredged material disposal options for the Oakland Harbor deepening project. Management options for regional dredged material are being evaluated in a separate EIR/S under preparation by the U.S. EPA and the State Water Resources Control Board for the LTMS (Long-Term Management Strategy).

JOHN L. TURNER, California Department of Fish and Game, letter dated April 18, 1994.

1. The Ninth Avenue Terminal/Landfill disposal option will only be implemented if required by the RWQCB. The RWQCB has indicated (see RWQCB comment letter on the DSEIR/S) that all of the material that is unsuitable for unconfined aquatic disposal would be appropriate for disposal

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at the Galbraith site, provided that four types of impacts at the Galbraith site are acceptably addressed.

2. This comment states that the details related to avoiding dredging in the Harbor's channel and berthing areas during the Pacific herring spawning season need to be coordinated with the Department. See response #8 to letter from Department of Interior, Office of Environmental Policy and Compliance.

3. Comment noted.

4. The available information indicates that significant impacts would not result from disposal of dredged material at the BFBA. Additional information on confined aquatic disposal sites, including BFBA, will be developed as part of the LTMS effort. Also, see response to EPA comment #12.

5. The full results of the Navy's monitoring of recent disposal at the Section 103 site are not yet available. Preliminary results are discussed in sections 4.2.7.1 and 4.3.4.1 of the SEIR/S.

6. Grading of the existing bayfront levee at Sonoma Baylands to the elevation of mean higher high water (2.9 feet NGVD) is not practicable because much of the ground adjacent to the levee crest, including the existing tidal marsh, is at or above the elevation of mean higher high water (3.4 feet NGVD). The Corps proposes instead to grade the levee crest to an elevation of 4.0 feet NGVD, subject to the approval of the other concerned agencies. At an elevation of 4.0 feet NGVD, inundation and saturation of the levee is expected to be sufficient to prevent denning by red fox. The levee crest would be graded immediately before the bayfront levee is breached. The material excavated from the levee would be spread over the dredged material along the landward side of the levee.

7. Site preparation is presently scheduled to begin during the winter of 1995. The Port has committed to conducting a pre-construction owl survey to determine if any owls are currently using burrows on the site. If so, the burrows and owls will be relocated off site. The SEIR/S text has been modified accordingly.

MICHAEL CHIRIATTI, JR., Governor's Office of Planning and Research, letter dated April 25, 1994.

1. This comment notes that the Port of Oakland has complied with the State Clearinghouse's review requirements for draft environmental documents pursuant to CEQA. Comment noted.

MARY GRIGGS, State Lands Commission, letter dated April 22, 1994.

1. This comment notes the importance of coordinating the proposed project with the Long Term Management Strategy (LTMS) process. Comment noted. The relationship of this project to the LTMS is discussed in section 1.5.

WALT PETTIT, State Water Resources Control Board, letter dated May 2, 1994, transmitting comments from the Regional Water Quality Control Board (RWQCB).

1. Comment noted.
2. Comment noted. These issues are addressed in response to specific comments below and, in addition, they will be addressed in greater detail in the Report of Waste Discharge to be submitted by the Port to the RWQCB.
3. Comment noted.
4. Comment noted. Evaluation of confined aquatic disposal (CAD) sites has been incorporated into the LTMS process as of May 1994.
5. This comment reflects agreement with the use of the Ocean Section 102 site for the volume of material identified for the selected plan in the DSEIR/S ($\pm$ 2.0 mcy). The volume for this site in the FSEIR/S is now estimated at 2.9 mcy. The 2.9 mcy of material is believed to be suitable for this site because it is Old Bay mud/Merritt sand.
6. Comment noted.
7. Potential groundwater impacts at the dredge site are discussed in the *Deep-Draft Navigation Improvements Design Memorandum Number 1, General Design and Final Supplement to the Environmental Impact Statement, Alameda County, California*, dated March 1988. A geologic study and hydraulic assessment of the Oakland Harbor area was performed for the Corps in 1987 by Geo/Resource Consultants, Inc., copies of which were provided to the Regional Water Quality Control Board, San Francisco Bay Region. As a result of several joint coordination meetings with the RWQCB, California Department of Water Resources, and Alameda County Flood Control and Water Conservation District, it was and is the Corps' understanding that there was a mutual agreement to the following "without" project conditions:
 1. Substantial areas of the Merritt Sand-Posey Aquifer are already exposed to saltwater intrusion from the Bay and that deepening the channels would not alter that fact;
 2. The Merritt-Posey Aquifer has a very limited areal extent; and
 3. The limited areal extent in conjunction with the already existing exposures to saltwater intrusion severely restricts its potential for further development and future increased use.

The RWQCB and DWR then shifted their concern to a potential for saltwater in the Merritt-Posey Aquifer to contaminate deeper aquifers in the Alameda formation through some as yet unknown "window." Consequently, a groundwater monitoring program consisting of three monitoring wells was coordinated with and agreed to by Dr. Teng-chung Wu, RWQCB, Mr. Carl Hauge, DWR - Central District, and Mr. John Monser, ACFCWCD. Groundwater monitoring was performed from July 1988 through July 1993 in the Oakland Inner Harbor area. The results of the monitoring show that the Merritt-Posey Aquifer indeed is contaminated by saltwater intrusion and that water drawn from a 150-foot-deep well screened in that Alameda formation is still fresh.

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- 1 It should also be noted that the ACFCWCD in their August 1993 study "Geologic Framework
2 of the East Bay Plain Groundwater Basin, Alameda County, California" describes (page 15) the
3 Merritt Sand as containing ". . . some groundwater, but is not considered a primary source of
4 supply because of its limited areal distribution and thickness."
5
- 6 8. The combined Sonoma Baylands-Montezuma-Port/Landfill alternative was not selected for
7 consideration because, after maximizing disposal of dredged material at Sonoma Baylands,
8 insufficient "cover" material would be available for Montezuma to provide a one-to-one "cover"
9 to "non-cover" ratio. The 1:1 ratio is proposed by the Montezuma Wetlands project sponsor,
10 Levine-Fricke.
11
- 12 9. Comment noted. See response to RWQCB comments #46, #47, #48, #51, and #52 below.
13
- 14 10. As information on the Montezuma site is still being developed (i.e., the Draft EIR/S is still being
15 prepared), it is premature to determine the need for off-site mitigation.
16
- 17 11. Comment noted.
18
- 19 12. Text has been revised to incorporate this comment. Data on water pollutants have been added
20 to the text.
21
- 22 13. See response to #7 above.
23
- 24 14. Text has been revised to incorporate this comment.
25
- 26 15. Text has been revised to incorporate this comment.
27
- 28 16. The sentence states general ways in which surface erosion and/or rainwater runoff or infiltration
29 from upland disposal can be reduced.
30
- 31 17. The use of internal multi-stage berms, also known as spur dikes, was considered for the Galbraith
32 facility. However, the additional cost to construct the spur dikes and the reduced capacity of the
33 containment area due to the loss of surface area caused by their placement, offset the potential
34 gain in containment area efficiency. This is primarily due to the limited area available for use at
35 the site.
36
- 37 18. This comment notes that the Regional Board will consider the chromium criterion when the
38 Interim Sediment Screening Criteria document is revised, and that staff will likely base any
39 changes to the criteria, in part, on data developed via the Bay Area Regional Monitoring
40 Program. Comment noted.
41
- 42 19. The impact definitions have been clarified in the text. Section 4.2.4 now reflects that temporary
43 impacts coincide with project dredging. Short-term impacts would occur during physical
44 placement of the material at a drying site, and would not include longer-term, post-disposal issues
45 such as drying, handling, or recontouring of dredged material.
46

20. The LPC (Limiting Permissible Concentration) described in the "Green Book" is defined by 40 CFR 227.27 as "(a)(2) That concentration of waste or dredged material in the receiving water which, after allowance for initial mixing, as specified in section 227.29, will not exceed a toxicity threshold defined as 0.01 of a concentration shown to be acutely toxic to appropriate sensitive marine organisms in a bioassay carried out in accordance with approved EPA procedures" and "(b) The limiting permissible concentration of the suspended particulate and solid phases of a material means that concentration which will not cause unreasonable acute or chronic toxicity or other sublethal adverse effects based on bioassay results using appropriate sensitive benthic marine organisms" Although the *Testing Guidelines For Dredged Material Disposal At San Francisco Bay Sites, Public Notice 93-2*, do not refer to the term LPC, the tests required by PN 93-2 test guidelines and the interpretation of these tests are synonymous with the "Green Book" evaluations conducted to determine compliance with LPC. For example, an applicant under PN 93-2 is required under Tier II to prepare an elutriate for the suspended particulate phase acute bioassay in accordance with the "Green Book" and to refer to this document for guidance on the appropriate mixing calculations. Therefore, by meeting PN 93-2 requirements, an applicant would also meet the LPC requirements as described in the "Green Book" and defined by 40 CFR 227.27 (a)(2).
21. See response to #20 above.
22. Text has been revised to incorporate this comment.
23. Comment noted.
24. During disposal, a decline in dissolved oxygen concentrations is expected at the Alcatraz disposal site (as discussed in section 4.2.7.2). The available information indicates that a depression in dissolved oxygen at this high-energy site would not result in significant impacts.
25. Fifteen minutes of overflow will be allowed for material that is suitable for unconfined, open-water disposal. Suspended solids levels will, without doubt, increase due to this standard practice (as noted in lines 44 and 45 on page 4.2-16 of the Draft SEIR/S); however, impacts are expected to be short in duration. Line 2 on page 4.2-17 was changed to discuss dredging activities in general (i.e., eliminating specific references to clamshell and cutterhead dredging methods) recognizing that, at the dredge site, barge overflow (of only barges containing material suitable for unconfined aquatic disposal) may occur.
26. Text has been revised to incorporate this comment.
27. Comment noted.
28. Comment noted. See response #20 above.
29. As the BFBA is not part of the Selected Plan, possible habitat restoration at this site is not addressed in this SEIR/S. Also, see response to EPA comment #12.
30. Comment noted. See response to comment #4.

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31. Comment noted. For reasons stated in section 7 of the FSEIR/S, the Bay Farm Borrow Area disposal site is not considered as part of the Oakland Harbor Project recommended plan. Use of engineering controls may be considered through the LTMS evaluation of this site.
32. See response to #31 above.
33. The identified typographical error in section 4.2.7.3 has been corrected.
34. The text has been revised in response to this comment.
35. See response to Golden Gate Audubon comment #24.
36. Comment noted. The Port will abandon the piezometers, installed along the perimeter of the Leonard Ranch site for the purpose of collecting baseline groundwater data, according to State and local standards. Also see response to Golden Gate Audubon Society comment #24.
37. Comment noted. See response to Golden Gate Audubon Society comment #24.
38. Comment noted. See response to Golden Gate Audubon Society comment #24.
39. The requested text change has been made.
40. The issue of turbidity at Sonoma Baylands and in San Pablo Bay is discussed in response to Marin Audubon Society comment #16.
41. This comment notes agreement that there is a net environmental benefit to removing contaminated sediments from the Oakland Harbor and placing them in a confined and controlled environment (e.g., the Galbraith site) constructed to RWQCB criteria. Comment noted.
42. Comment noted.
43. This comment states an opinion that there would be no unmitigable biological impacts at Montezuma Wetlands. The SEIR/S biologists disagree and believe the success of the proposed mitigation is uncertain, hence a conservative approach is taken in the SEIR/S.
44. The Port intends to submit the Report of Waste Discharge to the RWQCB by June 10, 1994, so that it may be possible for the RWQCB to consider Waste Discharge Requirements for the project at its September 1994 meeting.
45. Regarding levee stability, see response to RWQCB comment #51.
- Regarding leachate migration control, see response to RWQCB comment #52.
- Regarding the potential that dredged material containing an unacceptable level of contaminants could be discharged due to inadequacy of sampling, see response to RWQCB comments #49 and #50.

Regarding the potential that decant water may not meet water quality standards, see response to RWQCB comment #48.

46. Due to the unique nature of the project, the design for the Galbraith drying facility incorporates some engineered alternatives to specifications contained in CCR Chapter 15. Engineered alternatives were incorporated where the standards were not possible to meet due to site conditions, or not applicable. The design of the combined dike/cutoff wall containment system is intended to protect water quality.

47. The design of the drying facility at Galbraith Golf Course with respect to California Code of Regulations Chapter 15 is discussed in the following responses to comments: RWQCB comment #46, EPA comment #21, California Integrated Waste Management Board comment #5, Sierra Club comment #8, and P&D Environmental comment #10.

48. The low-permeability cutoff wall is designed to protect groundwater outside of the containment system by retaining elevated levels of contaminants within the landfill and thereby reducing the likelihood that water quality objectives will be exceeded outside the containment system.

Surface water discharged from the site will be routed through one of two vegetative control areas before it is discharged into the stormwater drainage ditch that leads to the Bay. If effluent monitoring required by the RWQCB shows that water discharged from the site exceeds applicable effluent standards, the Port can slow the rate of discharge from the site. Slowing the discharge would allow more settling time and the potential reduction of metals levels through natural processes.

49. The referenced report (HLA 1994) analyzed the adequacy of sampling and analysis from both strict statistical and regulatory perspectives. From a strictly statistical perspective, HLA's analysis indicated that additional samples would need to be collected to estimate the mean of a population for specific parameters. However, estuarine sediments are typically heterogeneous with variation in grain size, total organic carbon, and total volatile sulfides. These constituents typically control the concentration of metals and organics in sediment. Collection of a sufficient number of sediment samples in each area to be dredged and analyzed for the parameters of interest to account for these controlling variables is impractical and may not substantially change the existing conclusions concerning sediment quality.

In the absence of specific sampling protocol for upland disposal sites, it is the standard in the dredging community to utilize available in-Bay disposal guidelines. Public Notice 93-2, Testing Guidelines for Dredged Material Disposal at San Francisco Bay Sites (Corps February 1993) establishes minimum sediment sampling guidelines for in-Bay disposal options based on the volume of material to be dredged. For dredge volumes greater than 500,000 cubic yards (cy), the number of samples is determined on a case-by-case basis. For this project, the sampling frequency for an in-Bay disposal option was determined by the Corps with review by other regulatory agencies, including the RWQCB. Using the same sample frequency, about 50 samples would be required for the approximately 1 million cy slated for disposal at Galbraith. Therefore, based on these guidelines, the 69 sediment samples comprise a sufficient number to characterize bulk sediment chemistry.

- 1 50. The Port will conduct additional sampling after the dredged material dries for the purpose of
2 confirming that there are no "hot spots" present. The Port will submit the results of analytical
3 testing to the RWQCB. If the testing program shows that material within the drying facility
4 exceeds applicable waste acceptance criteria, the Port will work with the RWQCB to establish
5 a reasonable remediation program. Remediation could consist of removal of a portion of the
6 material for disposal at a more appropriate location, or burial of the material on site. However,
7 sampling the slurried dredged material as it is delivered to the drying facility will be problematic
8 and may not help identify "hot spots." Results of laboratory testing of the slurried dredged
9 material will not be available for at least 48 hours after the sample is obtained and, therefore, it
10 would be impossible to go back to the facility and locate the "hot spot."
11
- 12 51. See the following statement titled "Response to Seismic Design Comments on the DSEIR/S"
13 regarding results of the most recent geotechnical investigation of the site and discussion of seismic
14 design of the perimeter containment dikes.
15

16 Response to Seismic Design Comments on DSEIR/S
17

18 Seismic design of the proposed upland dredged material disposal facility has been evaluated as
19 a part of the geotechnical engineering study for the project conducted by Subsurface Consultants,
20 Inc. (SCI). The study has been completed since the preparation of the Draft SEIR/S and more
21 comprehensively characterizes subsurface conditions at the site. Dike stability and liquefaction
22 potential during earthquake shaking have been evaluated and mitigation measures incorporated
23 into the project geotechnical design.
24

25 a. Dike Stability
26

27 Dike slope stability analyses have been conducted for both static and earthquake (pseudostatic)
28 loading conditions. Short- and long-term conditions were analyzed for various dike construction
29 phases. Analyses indicate that the proposed dikes will have adequate factors of safety against
30 slope failure for static conditions, i.e., greater than 1.5. The pseudostatic stability analysis
31 indicates that the dikes will experience little or no permanent deformation in the event of small
32 to moderate earthquakes. However, a large magnitude earthquake on the Hayward fault may
33 cause some permanent lateral deformation of the dikes. The analysis indicates that the lateral
34 displacements will be of limited magnitude such that a dike breach and loss of dredged material
35 containment is unlikely.
36

37 In order to acknowledge the uncertainties associated with the engineering behavior of the landfill
38 materials underlying the site and to introduce an added degree of safety into the dike design, the
39 design team has elected to construct the dike in two stages. The initial dike stage will generally
40 be a low structure with a broad base width, which inherently increases its stability. The initial
41 dike will be raised to its final elevation after the initial placement of dredged material. During
42 this interval, the landfill and bay deposits will consolidate and gain strength resulting in an
43 increased stability prior to increasing the dike height. The vertical and lateral displacement of
44 the stage 1 dike will be monitored to confirm design assumptions. If necessary, the final design
45 of the stage 2 dike will be modified based on the measured displacements to maintain stability.
46

47 b. Potential for Impact Due to Loss of Containment

Potential impacts due to the loss of containment of the dredged material disposal area requires both the breach of the perimeter dike and the dredged soil being in a fluid state in which it can flow out of the containment area. In the unlikely event of a dike breach, the dredged material would only be in a fluid state capable of gravity flow for about one year following placement. Given the frequency of large magnitude earthquakes, the low risk of dike failure, and the short period of time that fluid dredged material will exist in the facility, the Port judges that the risk of adjacent areas being impacted by a loss of containment is very low.

c. Liquefaction

The investigation indicates that hydraulically-placed sands are located in a well-defined area along Airport Drive. These sands may experience liquefaction during moderate to strong earthquake shaking. Sands were also identified in a localized zone along the existing central drainage channel in the Galbraith site. In order to reduce the risk of dike instability due to liquefaction, the dike alignments have been modified to avoid these areas of high liquefaction potential.

52. The design of the combined cutoff wall and dike assumes that there will be an increase in hydraulic pressure within the unit. The purpose of a groundwater extraction system would be to relieve the hydraulic pressure within the unit and therefore decrease the movement of contaminants through the cutoff wall. While the dredged material is drying, a system of perimeter ditches will be made on its surface to facilitate drying as well as release water from the underlying soil/debris if necessary. Groundwater monitoring wells will be installed on the outside of the containment unit to confirm that the cutoff wall is effectively retaining contaminants that may be trapped within the landfill liquid. If the monitoring shows that the cutoff wall is not effectively attenuating contaminants from the landfill, the Port will investigate the cause of contaminant release and act to correct the failure.
53. Lateral migration of fluids from the landfill due to loading of dredged sediments will be mitigated by the dike/cutoff wall system. See also response to RWQCB comment #52.
54. Between 1 and 2 feet of topsoil will be placed over the dry dredged material. When dry, the dredged material will be low permeability, and will therefore act as a cap over the former landfill. The site will be graded to a slope that facilitates drainage and prevents ponding. The site will then be redeveloped into a golf course.
55. Groundwater monitoring will be conducted quarterly for the first year then semiannually for five to seven years (when the golf course is anticipated to be constructed). At that time, the Port will discuss long-term monitoring requirements with the RWQCB. Surface water discharge will consist of the initial decant water and water collected in the perimeter drainage ditch. The Port plans to sample the decant water per the requirements of the RWQCB's Waste Discharge Requirements and NPDES permit.
56. The additional potential impacts in RWQCB's Table 4 that fall under Geology, Soils and Seismicity include reference to potential settling and seismic issues. The design of the Galbraith facility is based on extensive geotechnical data and a prediction of the potential for settling. Since potential settling is quantifiable and the design compensates for it, settling was not considered potentially significant. Additionally, the design adequately addresses seismic concerns

Responses to Comments on the Draft SEIR/S

and, therefore, this potential impact would not be significant (see response to RWQCB comment #51).

The remaining impacts all fall under potential surface and groundwater impacts. Regarding additional groundwater impacts, see responses to RWQCB comments #49, #50, and #52. The installation of a cutoff wall, hydraulic and water quality monitoring, and the formulation of a leachate collection contingency plan reduces potential groundwater impacts to insignificance. Potential surface water impacts are addressed in response to RWQCB comment #48. The potential surface water impact will be added to Table S-2. See revised text for section 2.7.7 for a response to the design issue raised in this comment.

57. Section 2.7.7 has been modified to present two construction options for the Ninth Avenue Terminal facility. Option 1 consists of a containment structure constructed of a geotextile filled with dredged material, and Option 2 consists of a modified K-rail with boards attached at the top to increase freeboard. If the Ninth Avenue Terminal disposal option is needed (which it may not be), the site design will be submitted to the RWQCB for review and approval.

58. Material with the highest levels of pollutants (represented by samples OISS1, OITS5, and OITS5A) will be deposited at Galbraith only after dredged material with lower levels of contaminants has been placed in the ponds to form a liner. After the dredged material containing the highest levels of contaminants has been deposited, cleaner dredged material will be added as a cover.

59. A better estimate of the final grades would be 7 to 9 feet above existing grades. The text has been changed accordingly. This estimate is approximate pending several factors including actual settlements experienced following placement of the dredged material, actual volumes of dredged material placed, and final design of the golf course.

60. Recycling the decant water for use as make-up water was investigated. There are two problems with this concept. By recirculating the decant water, any potential contaminants in the decant water would tend to concentrate since the process would be in essence a "soil washing" procedure. Secondly, there is a logistical problem. The makeup water would be needed in large quantities instantaneously with the dredged material slurry process. However, the detention time in the containment area is on the order of 14 days, so there is a lag between when the makeup water is required and when the recycled decant water would actually be available. In addition, a large storage pond would have to be developed to hold the decant water for pumping and there is insufficient space available to do so.

Responses to Comments from Regional and Local Agencies

COLETTE MEUNIER, Planning Director, City of Alameda, letter dated April 28, 1994.

1. The dredge plant operating in the vicinity of the Oakland/Alameda ferry service between Jack London Square and 2990 Main Street in Alameda is expected to be only minimally affected since the dredging operation only affects, at any given time, less than one-third the width of the navigation channel. The dredging contractor will announce the project in the "Notice to

Mariners" prior to the start of construction to allow for ferry operation adjustments (i.e., navigation around the construction work). It is anticipated that no change in ferry scheduling would be required as a result of the Oakland Harbor deepening project construction

2. Currently, the Port is served by three railroads in the Port Area: Southern Pacific, Union Pacific, and Santa Fe. The first two railroads have intermodal railyards that are close to Port harbor facilities and Port shipping lines. Santa Fe has a railyard in Richmond, but shares rail lines with Southern Pacific to serve the Port of Oakland.

Excess capacity is currently available in intermodal operations, especially at the Southern Pacific yard. Sufficient excess capacity exists to accommodate the increase in discretionary cargo expected as a result of the harbor deepening project.

New intermodal capacity will be developed at the Port in the near term with the acquisition of leased property from the Oakland Naval Supply Center and, in the long term, with the construction of a Joint Intermodal Terminal, currently in the planning stages. However, completion of these projects is not required to realize the benefits of the harbor deepening project.

3. Since significant rail infrastructure and capability exist in the Port area, much of the increase in cargo transported by rail will be in the form of discretionary cargo that can move overland by rail. This will translate into additional train cars added to existing train movements, rather than additional train movements. Train lengths as a result could be lengthened, adding a few minutes of delay to each train crossing of an intersection.

Extensive rail signal and pedestrian safety improvements are programmed to be implemented as part of the Amtrak development project in Jack London Square. Southern Pacific and Caltrans will be funding and implementing these improvements to allow for faster train movements in the Port area. These improvements will be installed prior to the new Amtrak station opening in Jack London Square. Construction for this project is now underway and will be completed by late 1994. All pedestrian and safety issues were addressed and resolved as part of the Amtrak project.

4. See response to League of Women Voters comment #19.

5. The proposed project includes relocation of existing submarine utilities, specifically the Navy sewer line which carries sewage from the Alameda Naval Air Station to the Oakland Naval Supply Center (see section 2.2.1 of the Final SEIR/S). The present 16-inch Force Main has an existing bottom-of-pipe depth of -45 feet mean lower low water (MLLW) and will be relocated at a channel crossing depth of -54 feet MLLW prior to the start of channel deepening dredging in the immediate area.

The relocation of the sewer line will be accomplished in three steps. The first step consists of construction of a new 16-inch pipe channel crossing at a 50-foot horizontal offset from the existing main, including channel slope placement areas through rubble mound jettings, railroad undercrossing, and precise alignment tie-ins. The second step would consist of system flushing, temporary shutdown of the Alameda pump station (estimated to be 3 hours), and two tie-ins each into existing flanged connection points. The last step would include removal of existing channel

crossing pipe and abandonment in-place of other portions of bypassed piping. A detailed description of the three steps in relocating the sewer line and impacts follows.

Step 1. Pipe Construction

Forty-eight-inch diameter steel casing will provide protection for the new pipe passing through the rubble mount jetties. The rubble mound stones will be removed and stockpiled for re-use after pipe and casing placement. Also, 48-inch steel casing will be jacked under the existing railroad tracks near the top of the bank on the Oakland side of the project. Sheetpiling will be driven on both sides of the railroad tracks (a minimum of 8.5 feet clearance from the RR track centerline) for structural support during excavation, jacking, and pipe placement. The railroad tracks will remain clear and fully operational during all construction. Extreme precaution will be taken to protect the existing force main from all construction activities. Telescoping sleeves will be located at the top of rubble mound jetties to allow for expansion and provide earthquake protection. Pipe anchoring will be installed at all angle points between the telescoping sleeves and the new connection points at both Alameda and Oakland above-water-level bank areas. The existing valve and valve box on the Oakland bank will be replaced by a new valve and valve box in the new relocated line. A stable support base will be constructed for the valve box. Standard pressurized pipe testing procedures will be required prior to final burial as well as visual dry land and underwater inspection of alignment and elevation. As-built underwater record photos will be required, if visibility allows useful definition.

Step 2. Temporary System Shutdown

It is estimated that approximately 3 hours will be required to make the two precision tie-ins (one on the Alameda bank and one on the Oakland bank) for the new relocated sewer main. All possible pre-tie-in work will be checked and double-checked to assure efficient and workable connections. New connections are designed to be integrated into mechanical connection points on the existing pipe. The tie-in on the Alameda bank will be made at the north end of the existing vacuum breaker section where a vertical 22.5-degree, flanged fitting exists. A section of existing pipe will be removed and a horizontal 45-degree, flanged fitting installed. The tie-in on the Oakland bank will be made at the north end of the existing valve connection, where an in-line flanged fitting exists. The existing valve will be removed and a horizontal 45-degree, flanged fitting installed. The flanged connections will provide the necessary thrust resistance at the new connection points and new thrust blocks will not be required. However, as an added precaution, pre-tie-in, poured and cured concrete vertical support piers with steel tie-down collars will be utilized to restrain the 45-degree fittings after their installation.

Prior to the scheduled pumping station shutdown, the existing main will be purged by pumping a designated amount of chlorine-treated water through the system so that when the line is disconnected and portions removed, no contamination will result.

Step 3. Existing Pipe Removal or Abandonment

After disconnecting the existing pipe on both banks, the water remaining in the channel crossing reach (lower elevation pipe) will be pumped from the Oakland bank to the nearest gravity flow manhole location prior to the removal of the channel crossing pipe. The pump outlet hose will

be run under any crossing railroad tracks between existing railroad ties. Job site coordination between the contractor and the Oakland railroad yard operation will be emphasized in the project specifications.

The channel crossing reach of the existing pipe will be removed prior to dredging the channel to the -42-foot MLLW project depth. Extreme precaution will be taken to protect the new channel crossing force main from all pipe removal operations. The channel crossing pipe removal will extend 20 feet beyond the channel side slope toes. The existing pipe will be disconnected or cut under water and the remaining side slope portions sealed for abandonment. The remaining pipe embedded in the channel slopes will be filled with concrete and abandoned in place.

Construction-related air quality, noise, and water quality impacts from the relocation of the sewer line are expected to be short term and insignificant.

CLEVE WILLIAMS, Director, City of Oakland, Office of Parks and Recreation, letter dated May 2, 1994.

1. The issue of fugitive dust emissions has been studied by air quality specialists and is addressed in section 4.1 of the SEIR/S. The estimated dust-in-air concentrations will not exceed the maximum values set by the National Ambient Air Quality Standards (NAAQS) and the California Ambient Air Quality Standards (CAAQS) during the proposed tilling and grading activities at Galbraith Golf Course. During all stages of the project, dust generation from exposed soil will be controlled. During construction and until the entire dike-enclosed area is covered with the slurried material, standard dust palliative measures will be used such as rewetting and covering the trucks with tarps. The outside slopes of the containment dikes will be planted with vegetation that will not only have a positive aesthetic impact but will significantly reduce dust emissions off the slopes. During the crust management program period, as the surface dries, the tilling activities will, in effect, constitute rewetting of the top dry crust, as the wet subsurface material is brought to the surface to be exposed to the drying action of the sun and wind. Once the crust management program is finished, the construction of the golf course will commence, and standard construction dust management practices will be used.

The Human Health Risk Assessment (HLA 1994a) includes the results of fugitive dust modeling for the Galbraith drying facility. The evaluation predicted the amount of dust-in-air and the concentrations of chemicals that could be adsorbed to the dust. The assessment evaluated the potential health risks to the different populations from exposure to the dust. The results showed that the predicted levels of dust-in-air would be well below the National Ambient Air Quality Standards and the California Ambient Air Quality Standards which regulate allowable levels of dust-in-air. In addition, the potential health risks to driving range golfers and workers would be well below the U.S. EPA and California EPA threshold levels of concern.

2. The Port does not intend to use the dredged material as the base upon which to grow the turfgrass and currently plans to import as much as 2 feet of topsoil (this may include the material imported to construct the berms) for the turfgrass base. The Port will be consulting with qualified golf course architect(s) for technical advice and recommendations to ensure that a turfgrass base is

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constructed that will provide the optimum growing conditions for the type(s) of grass(es) selected for this golf course.

3. See response #2 above.

4. See response to City of Oakland, Office of Planning and Building comment #2.

5. See response to City of Oakland, Office of Planning and Building comment #1.

6. See response to City of Oakland, Office of Planning and Building comment #1.

CLEVE WILLIAMS, City of Oakland, Office of Parks and Recreation, letter dated May 17, 1994.

1. This information has been incorporated into section 5.3.6.2 of the SEIR/S and the Mitigation Monitoring and Reporting Plan (Appendix J).

ALVIN D. JAMES, Deputy Director for City Planning, City of Oakland, Office of Planning and Building, letter dated May 2, 1994.

1. The SEIR/S text has been modified to reflect the comments presented in the City of Oakland Department of Parks and Recreation's letter dated May 17, 1994. The Port and the Department both conclude that the provision of the Curt Flood Sports facility in East Oakland will adequately mitigate for the loss of the soccer field at the Galbraith site. This information has been incorporated into section 5.3.6.2 of the SEIR/S and the Mitigation Monitoring and Reporting Plan (Appendix J).

2. The clubhouse restaurant, driving range, and putting green will be in operational use in their existing locations during the life of the project. A minimum 40-foot setback from toe-of-berm to buildings has been recommended by the Port geotechnical consultant to avoid adverse impacts due to soil settlement. Parking for the interim uses will not be affected by the project. The parking lot adjacent to the soccer field will be impacted by the project, but the lot adjacent to (east of) the clubhouse will remain.

Noise impacts have been studied and are detailed in section 4.6 of the SEIR/S. The elements that could possibly cause excessive noise, i.e., the unloader and booster pumps, will be muffled or located such that the noise impacts will be insignificant.

On potential dust impacts, see the response to City of Oakland, Office of Parks and Recreation letter dated May 2, 1994, comment #1.

3. If the Crust Management Program is extended, the City golf course interim uses would be extended beyond the five-year drying period as provided in the Port-City MOU. On health effects of fugitive dust for the users of the interim facilities, see the response to City of Oakland, Office of Parks and Recreation comment #1 in their letter dated May 2, 1994.

4. As discussed in section 5.3.6.2, the total impact of the temporary loss of the recreational resource cannot be mitigated to a level of insignificance. However, the Port of Oakland and the City of

Oakland have agreed to mitigate the impact of the temporary closing of Galbraith Golf Course on two groups of Oakland residents: seniors and youths. The Port is mitigating for the loss of recreational opportunities to these two groups because their access to suitable courses is limited. While non-eligible groups would be inconvenienced by the temporary loss of Galbraith Golf Course, they have access to similar facilities in the same vicinity at comparable costs. After the golf course reconstruction, all groups would have the opportunity to play golf at an improved public facility.

Seniors

There are 71 members of the three Seniors Golf Clubs at Galbraith Golf Course. Twenty (20) of them are Oakland residents. The others are residents of Walnut Creek (2), Alameda (3), San Lorenzo (2), Fremont (2), San Francisco (3), Daly City (1), Danville (1), Castro Valley (8), Moraga (1), San Leandro (12), Hayward (7), Antioch (1), San Carlos (1), Berkeley (1), San Jose (1), El Cerrito (1), Richmond (2), Millbrae (1), and Palo Alto (1).

The City of Oakland in concert with the Port of Oakland is negotiating with a local municipal golf course operator to provide subsidies for greens fees for all members of the three Galbraith Seniors Golf Clubs and all other Oakland resident seniors who are users of the Galbraith facility.

Youths

Estimates of the number of youth golfers range from a low of 9 to a high of 35. The youth golfer program will continue to be held at Galbraith. The primary practice location will be the driving range that will remain while the dredged material project is underway. The City of Oakland is negotiating with San Leandro Golf Course management and Chabot Golf Course management to allow the youth access to those courses on a basis similar to the access they currently have at Galbraith, Saturday afternoons, at a fee less than \$5.00 per round. The actual fee will probably range from \$0.00 to \$2.00.

5. The Office of Parks and Recreation will tag, remove, and store any memorials which can be saved to be reinstalled on the new course. This is not considered a significant environmental impact under CEQA.

ELMER PENARANDA, Assistant Planner, City of San Leandro, letter dated May 2, 1994.

1. On odors, see response to P&D Environmental comment #19.
2. See revised Figure 2.7.6-2. The crest elevation of the containment dike will actually be approximately 25 feet above Airport Drive.

The Port plans to landscape the berms in a manner consistent with the surrounding area. The toe of the containment berm will be set back at least 50 feet from Doolittle Drive. Most of the berm will be located much further from the roadway (see Figure 2.7.6-1). The berm will be landscaped with trees removed from the Galbraith site. Irrigation water will be available from the EBMUD reclaimed water pipeline. The visual impact of the proposed facility viewed from San Leandro should not be significant.

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3. See response to RWQCB comment #51.
4. A traffic study was completed to evaluate the impacts of importing levee material during construction of the dredged material disposal facility, and importing topsoil at the end of the sediment drying period. That evaluation has been added to section 4.8.4.6. The conclusion of the study is that these traffic impacts will not be significant.
5. As a part of the State Highway system, Doolittle Drive, State Route 61, was designed to accommodate high truck traffic volumes.
6. The landfill located under the Galbraith Golf Course was closed between 1963 and 1965. At that time it was graded and covered with a thin layer of clayey soil. The regulations implemented by the California Integrated Waste Management Board, Title 14 of the California Code of Regulations Section 17796, address the post-closure land use for former landfill sites. These regulations specify that plans for the proposed land use on a former landfill site shall be submitted to the Local Enforcement Agency and the California Integrated Waste Management Board (CIWMB). The purpose of this review is to confirm that the proposed land use will not increase the potential threat to public health and safety and the environment. The Port has circulated the DSEIR/S to the CIWMB and will submit site plans to them as well as the Local Enforcement Agency. The California Integrated Waste Management Board has not chosen to permit other upland disposal sites for dredged material and it is expected that this project would not require a Waste Management Board permit either, due to the difference between dredged material and other more common landfill wastes. In contrast with dredged material, municipal landfills accept wastes that may putrify and attract pests.

RICHARD LEHTINEN, Senior Environmental Planner, Sonoma County, Department of Planning, letter dated May 11, 1994

1. The text has been changed accordingly (see section 5.3.4.2, Project Impacts).
2. Comment noted.
3. Comment noted. The inconsistency of this use with the General Plan is stated in section 5.3.4.2.
4. Comment noted. This information has been added to section 5.3.4.2.
5. Comment noted.

MARC F. RODDIN, Metropolitan Transportation Commission, letter dated April 5, 1994.

1. Marin County has recommended in the FEIR for the Redwood Landfill Solid Waste Facilities Permit Expansion Project (Woodward-Clyde Consultants 1994) that truck traffic to the Redwood Landfill be limited to the hours between 3 A.M. to 6 A.M., and 10 A.M. to 3 P.M. Marin County has concluded that, with implementation of this mitigation measure, traffic impacts would be reduced to a less than significant level. If the Leonard Ranch/Redwood Landfill disposal option is selected for the Oakland project, this mitigation measure will be adopted as part of the project.

2. The requested editorial change has been made.
3. The requested editorial change has been made.
4. The requested editorial change has been made.
5. The emission factors in Table 4.1.3.1-3 of the DSEIR/S have been updated in the FSEIR/S (see Table 4.1.3.1-2), as suggested by the comment.
6. The significance criteria has been modified as suggested by the comment. However, since none of the affected roadways are expected to operate at level of service E or F, the project-induced changes are still not considered significant.
7. The volume and capacity of traffic on key roadway segments for the project and the no-project situation has been added to Table 4.8.3.1-4 as suggested by the comment.
8. The requested text change has been made.
9. The existing level of service (LOS) and LOS due to the project have been added to Table 4.8.3.1-6 as suggested by the comment. The definitions of different levels of service have also been added to the text in section 3.8.1.2.
10. The text in question has been changed to reflect that truck traffic to Redwood Landfill would be limited to the hours between 3 A.M. to 6 A.M., and 10 A.M. to 3 P.M., as recommended by Marin County. Marin County has concluded that with implementation of this mitigation measure, traffic impacts would be reduced to a less than significant level.
11. The requested editorial change has been made.
12. This FSEIR/S reflects any changes in the draft Mitigation Monitoring and Reporting Plan shown in the DSEIR/S; please see Appendix J.

JOHN B. LAMPE, East Bay Municipal Utility District (EBMUD), letter dated 28, 1994.

1. See response to City of Alameda comment #5.
2. As suggested, the text of section 3.7.3.6 related to reclaimed water use at Galbraith Golf Course has been corrected to reflect two points: (1) EBMUD supplies reclaimed water to the golf course at a rate of \$0.77 per hundred cubic feet; and (2) the District, City of Oakland, and Ransom-McKay Golf, Inc., currently have a long-term agreement stipulating that a minimum amount of reclaimed water be used at the golf course.
3. The text has been changed accordingly.
4. The text has been changed accordingly.

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5. The impact of the closing of Galbraith Golf Course on the Galbraith Water Reclamation Project is discussed in sections 5.3.6.1 and 5.3.6.2.
6. See response to EBMUD comment #5.
7. As suggested, the text of section 13.2 has been modified to reflect that the EBMUD and the City of Oakland have coordinated to renegotiate the agreement for the Galbraith Water Reclamation Project.
8. Information on the reclamation project and associated agreement has been incorporated into section 4.7.4.6. Only the potentially significant impacts of the project under each alternative are discussed in Appendix G.
9. The impact of the project on the Galbraith Water Reclamation Project is not a significant impact (see section 5.3.6.2) and is thus not discussed in either Appendix I or Appendix J.

T. H. LINDENMEYER, Environmental Specialist, East Bay Regional Park District (EBRPD), letter dated May 4, 1994.

1. Planned activities associated with the marine transport of sediment to loading platforms leading to the Galbraith site are not expected to adversely affect overwintering shorebirds and waterfowl in either San Leandro Bay or along Oyster Bay Regional Shoreline. Barge and tugboat activity is scheduled to begin on June 1, 1995, and it is estimated to take approximately 165 days to complete.

Should barge transport occur during the winter, the project would not cause a significant local increase in vessel traffic in San Leandro Bay. Disposal at the Galbraith site would require an estimated 542 round trips, based upon a 2,400-cy barge capacity for the 1.2 million cubic yards of sediment that could be disposed at the site. Under the assumption that the work is completed in 165 days, an average of 3.3 round trips per day would be made. Although ambient marine traffic data are not available for San Leandro Bay, U.S. Coast Guard vessel traffic staff indicated that an increase of 3.3 round trips per day is not a significant increase in traffic for that area (Staten 1994). Shorebirds and waterfowl along the Oyster Bay Regional Shoreline (Option B) would not be affected by the additional barge traffic because both proposed unloading platforms would be approximately 5 miles west of the shoreline.

Because the project would not substantially increase the types or volume of marine traffic during the overwintering period for shorebirds and waterfowl in San Leandro Bay or along the Oyster Bay Regional Shoreline, this impact is considered to be not significant to overwintering shorebirds and waterfowl.

2. Comment noted.
3. Comment noted. The Port will work with the EBRPD to determine the feasibility of developing a leg of the regional trail system through the reconstructed golf course.

Responses to Comments from Other Organizations

OSCAR J. COFFEY, JR., President, CEO, Oakland/Alameda County Black Chamber of Commerce, letter dated April 14, 1994.

1. This comment indicates support for the proposed project. Comment noted.

ANGELO J. SIRACUSA, President, Bay Area Council, letter dated April 25, 1994.

1. This comment indicates support for the proposed project. Comment noted.

KAREN RASMUSSEN, California Trucking Association, letter dated April 7, 1994.

1. This comments indicates support of the proposed project. Comment noted.

ELAINE MARTIN, Coastal Advocates, letter dated May 1, 1994.

1. The referenced environmental documents fully considered all reasonable and practical alternatives within study authorities, scopes, and schedules available at the time the documents were prepared.
2. The FSEIR/S (section 2.7.1) acknowledges that use of the ocean disposal site is contingent upon EPA's final rule on the ocean Section 102 site designation -- currently expected in June 1994. The ocean site would not be used for dredged material disposal from the Oakland Harbor project unless the EPA rule making and the Site Management and Monitoring Plan are finalized.
3. The full volume of dredged sediment planned for ocean disposal under each of the 12 disposal alternatives is shown in Table 2.8-1.

ARTHUR FEINSTEIN, Program Coordinator, Golden Gate Audubon Society, letter dated April 29, 1994.

1. The newer deep draft vessels will be used regardless of deepening the Oakland Harbor channels. There is almost no change in the vessel sizes due to the deepening project. Also, these vessels serve multiple ports worldwide and they are presently too large to pass through the Panama Canal.
2. Responses to the LaRiviere's opinions as to the viability of the Sonoma Baylands Wetlands Restoration Project are contained in the response to the letter from the Citizens Committee to Complete the Refuge; see Figure N-2 (page N-47). See also response #1 to the letter from Florence and Philip LaRiviere.
3. On the value of the 55 acres of seasonal wetlands at the Sonoma Baylands site, see the response to Marin Audubon Society comments #10 and #11.
4. Comment noted. Census frequency is a variable always open to professional disagreement. The fact is that the Sonoma Baylands site is highly disturbed due to agricultural operations on the site. Also, see response #5 below.

1 5. The comment addresses three items and the following responds to the comments in the order
2 presented.

- 3
4 a. Regarding a cumulative impact analysis between seasonal and tidal wetlands, the
5 following quotation from the *Final Demonstration Project Report and Environmental*
6 *Assessment for the Sonoma Baylands Wetland Demonstration Project*, dated April 1994,
7 San Francisco District, U.S. Army Corps of Engineers is provided and incorporated by
8 reference into the Oakland Harbor FSEIR/S.

9
10 In general, diked and drained former wetlands on the periphery of San
11 Francisco Bay provide important stop-over and/or wintering areas for
12 migratory waterbirds. However, the functional values provided by the
13 wetland areas within the active hayfield on the Sonoma Baylands site are
14 limited by the marginal and ephemeral nature of the wetlands, active
15 pumping of stormwater from the site, and the repeated disturbance of the
16 wetland areas by agricultural activities. Thirty-eight bird surveys were
17 conducted on the Sonoma Baylands site for the U.S. Fish and Wildlife
18 Service between 1982 and 1989 (USFWS 1992b). The surveys found
19 that relatively few waterbirds used the site, apparently as a result of its
20 generally well-drained condition. The total numbers of waterbirds
21 counted on the Sonoma Baylands site and the adjacent Leonard Ranch
22 site combined were 52 waterfowl, 692 shorebirds, 32 waders, and 673
23 gulls. Even when the limited intensity of the survey effort is considered,
24 these numbers are quite low considering the 542-acre size of the area
25 surveyed. The limited available information on waterbird use of the
26 Sonoma Baylands site does not indicate that the site provides significant
27 habitat values that would not be provided by restoring the degraded
28 wetlands on the site to tidal action.

29
30 There were about 9,000 acres of seasonal wetland in the North Bay in
31 1988 (SFEP). There was little change in the acreage of seasonal wetland
32 in the North Bay from 1975 to 1988 (SFEP 1991) and there is no reason
33 to expect that there has been a substantial change since 1988. Within
34 one-half mile of the Sonoma Baylands site there are well over 500 acres
35 of similar hayfields that are protected by conservation easements through
36 the California State Coastal Conservancy or the Sonoma Land Trust
37 (CSCC 1993). Therefore, abundant high-tide refuge areas for waterbirds
38 will remain available within a short distance of the Bay shoreline in the
39 Sonoma Baylands area.

- 40
41 b. The FSEIR/S discusses distinctions between seasonal wetlands and tidal wetlands in the
42 main volume, and appendices H, M, and N.

- 43
44 c. While no compensation for the conversion of seasonal wetlands to tidal wetlands is
45 proposed either by the Corps' Sonoma Baylands Wetland Demonstration Project or the
46 Oakland Harbor Navigation Project, the California State Coastal Conservancy has stated
47 its intent to increase the seasonal wetland acreage on the 830-acres parcel held by the

Conservancy with the Sonoma Land Trust. The Conservancy's proposed actions include the creation of 24 acres of seasonal wetlands on the Sonoma Baylands site in the setback area between the proposed peripheral levee and the existing peripheral drainage channel, as well as the creation of seasonal wetlands on much of the northern 250-acre parcel (Coastal Conservancy letter to the U.S. Fish and Wildlife Service, dated March 17, 1994).

6. See response to California Department of Fish and Game comment #7.

7. The mitigation ratio for the loss of wetlands and other "waters of the U.S." regulated under Section 404 will be in the range of 1.1:1 to 1.3:1. The final ratio will be determined once the design of the mitigation areas is finalized. The variance depends upon the design of the wetland edge and buffer areas since the absolute acreage available is limited by:

- FAA regulations regarding creation of features to attract wildlife within the runway protection zones, and
- The limited acreage of undeveloped "upland" areas within the Metropolitan Oakland International Airport.

The proposed mitigation areas will be designed to provide greater habitat value than the existing wetlands to be replaced because they will be contiguous, and maintained. See the revised description in section 2.7.6.3 and the revised Figure 2.7.6-1 for the location of the mitigation areas.

8. The design of the containment dike along the south-southwestern border of the Galbraith site has been modified to avoid impacts to the existing adjacent seasonal wetland. The dike will be constructed at a shallow slope of 3:1 (see Figure 2.7.6-2). No impacts on the topography of the adjacent wetland are anticipated.

9. See response #8 above and response #51 to the State Water Resource Control Board letter dated May 2, 1994..

10. As described in section 2.7.6, the decant water will not be discharged into a wetland (as proposed in the Draft SEIR/S), but will be discharged into the Bay when discharge criteria (established by the RWQCB) are met.

11. The pipeline pumps for the Galbraith site under Option A would be placed more than 500 feet from Arrowhead Marsh to avoid any potential impacts upon nesting clapper rails, consistent with guidance from the U.S. Fish and Wildlife Service (K. Miller 1993). The East Bay Regional Park District, which manages Arrowhead Marsh, concurs with these measures (see Park District comment letter). The placement of a floating pipeline in San Leandro Bay will not require any placement of permanent structures (i.e., pilings). The placement of the pipeline will not cause significant noise impacts.

12. See response to Golden Gate Audubon comment #11.

Responses to Comments on the Draft SEIR/S

13. No impacts on the clapper rails at Arrowhead Marsh are anticipated. See also response to Golden Gate Audubon comment #11, and response #17 to Department of Interior, Office of Environmental Policy and Compliance letter dated May 5, 1994.
14. The text on herring spawning in the eelgrass beds of the Borrow Area has been corrected as suggested. Dr. Kitting's reports have been obtained and the relevant information has been added to section 3.4.3.3. The available information and analyses indicate that disposal at the BFBA would not result in significant impacts. However, the Corps is continuing to develop information that will enhance the environmental evaluation of disposal of dredged material at this site through the LTMS.
15. As discussed in sections 4.4.4.1 and 4.4.5.3, the proposed project is not expected to result in significant toxic effects on the least tern.
16. This roosting site was acknowledged in sections 3.4.1.1 and 3.4.2.5. The proposed project is not expected to result in significant disturbance of the brown pelican.
17. Section 3.4.3.3 describes feeding by the pelican and least tern in and near the BFBA. As described in section 4.4.5.3, disposal at this site is not expected to have significant adverse effects on feeding by these two species, which will likely shift to other parts of their feeding range. Significant exposure of these species to toxic chemicals is also not expected.
18. The Bay Farm Borrow Area alternative disposal site is not included in the Oakland Harbor recommended plan. This alternative disposal site has been eliminated from further consideration as part of the Oakland Harbor project for the reasons stated in section 7 of the FSEIR/S, as well as the reasons stated in comment #35 of the U.S. EPA letter (dated May 2, 1994); in comment #12 of the San Francisco Bay Conservation and Development Commission (letter dated May 2, 1994); and comment #31 of the State Water Resources Control Board (letter dated May 2, 1994). Since the Bay Farm Borrow Area alternative disposal site is not included in the Oakland Harbor recommended plan, there is no reason to request the Fish and Wildlife Service to conduct a formal Section 7 consultation.
19. Studies have shown that fish tend to avoid sites where dredged material disposal is occurring, and it is expected that fish also avoid active dredging sites. Reference to these studies has been added to section 4.4.4.1. The available information indicates that disposal at the BFBA would not have an adverse effect on the fate of the eelgrass beds, as discussed in section 4.4.5.3.
20. Typically design of models includes field measurements both during and after "construction" in order to verify the model. The Corps is not aware of any models that showed "no mounding" at the Alcatraz disposal site.
21. The Bay Farm Borrow Area alternative does not include a sediment curtain wall as part of the proposal.
22. The navigation systems that will be used are very unlikely to give substantively inaccurate readings. In addition, the location of the barges during disposal operations will be independently monitored. The eelgrass beds and the surrounding areas are in shallow water, which the tugs and

barges will not be able to enter. See response to comment #12 of the U.S. EPA letter dated May 2, 1994.

23. This comment requests that the Bay Farm Borrow Area be removed from the preferred Alternative B2. The Bay Farm Borrow Area is not part of Alternative B2 (see Table 2.8-1).

24. While the Leonard Ranch disposal option has been described and evaluated on a conceptual basis, a detailed design has not been prepared and is not proposed. Ultimately, the Leonard Ranch disposal option was not included as part of the selected alternative because of a combination of factors, including cost, concerns from the Marin Audubon Society about loss of seasonal wetlands, and institutional concerns represented by Sonoma County staff and officials about the need to mitigate the loss of open space. A detailed design might provide further information about environmental impacts, and might allow a more refined cost estimate, but would not eliminate the economic and institutional disadvantages of the site. Thus, a detailed design that would allow precise response to many of the comments on the Draft SEIR/S has not been performed.

Preliminary cost estimates were prepared on November 15, 1993, for a number of alternatives, i.e., combinations of disposal options (U. S. Army Corps of Engineers, Oakland Harbor, -42' Deepening, Draft GDM, Alternatives, Preliminary Cost Estimate, S. C. Fong, P. Pang, and E. Hong). The comparison between Leonard Ranch and Galbraith as disposal sites illustrates the disadvantages of Leonard Ranch. Total costs for drying material at Leonard Ranch and subsequent disposal at Redwood Sanitary Landfill were estimated at \$44,220,000. This cost included an estimate of \$3,600,000 for site preparation. The estimated total cost for drying material at Galbraith was \$18,270,000. This cost included an estimate of \$4,140,000 for site preparation. It did not include the costs of constructing a new and improved golf course, but did include the estimated value of the existing improvements. This cost difference, nearly \$26 million, is dramatic, and a substantial cost difference will remain, although it might be changed somewhat by preparation of a detailed design. For example, detailed design work at Galbraith has increased the estimated cost of site preparation from \$4.1 million to \$9.6 million to address groundwater and surface water issues (see footnote to Table 7.2.1-1). Given the concerns raised by the Regional Water Quality Control Board and Sonoma County about Leonard Ranch, and the limited groundwater data presently available, it is likely that detailed design would also increase the site preparation costs at Leonard Ranch.

In addition to the cost difference, concerns were raised about the loss of seasonal wetlands at Leonard Ranch. In partial response to those concerns, the area proposed for drying at Leonard Ranch was reduced to preserve the largest seasonal pond. However, comments by groups such as the Marin Audubon Society indicate that resolution of seasonal wetlands issues at Leonard Ranch will be controversial and will likely add further costs to this option.

It is impossible to predict either the time frame for regulatory review or the likelihood of success for a proposed drying facility at Leonard Ranch. First, the site is publicly owned, was bought with public open-space funds, and is encumbered by a deed restriction that limits the use of the site to open space. The site was purchased by the Sonoma Land Trust, using funding allocated by the California Wildlife, Coastal and Park Land Conservation Act (Proposition 70). Use of that land for any purpose but the purposes of agricultural preservation, open space preservation,

and habitat would be at the discretion of the Sonoma Land Trust and would require mitigation. Second, the site is designated for Land Extensive Agriculture in the Sonoma County General Plan, and is within a designated Scenic Corridor (see section 5.3.4.1). The County has broad discretion, both over any potential uses that might conflict with agriculture and/or scenic preservation, and over any mitigation that might be needed to offset significant adverse impacts on agriculture and scenic preservation (see comment letter from Sonoma County Planning Department). It is likely that those issues, if they can be resolved, will involve additional costs and further time delays. If the Leonard Ranch site is selected as a rehandling facility for another project, a determination will be made at that time by the CEQA and NEPA lead agencies whether a supplemental EIR/S is required.

25. See response to comment #24.

26. See response to comment #24, and the response to Department of Interior comment #6.

27. See response to comment #24.

28. Comment noted. For reasons stated in section 7 of the FSEIR/S, the Montezuma Wetlands alternative disposal site is not considered as part of the Oakland Harbor Project recommended plan.

29. As described in section 4.4.5.1, disposal at the ocean site is not expected to have adverse effects on marine birds. The water area affected by disposal will be a very small part of the feeding area of any marine bird population. If disposal interferes with feeding conditions, the birds can move to other nearby locations. The effect of each barge dump will last only a few minutes to a few hours. Since only material deemed suitable for unconfined aquatic disposal will be disposed at the ocean site, no toxic or food chain effects are expected for marine birds or mammals. The effect of disposal on marine birds and other biological resources will be monitored as part of the Site Management and Monitoring Plan, which will include provisions for corrective actions if adverse effects are indicated, as discussed in section 4.4.5.1 of the SEIR/S.

FLORENCE LaRIVIERE and PHILIP LaRIVIERE, Citizen's Committee to Complete the Refuge, letter dated April 26, 1994.

1. See Figure N-2 (page N-47) for the response to this letter. See also Figure N-3 (page N-49), which illustrates the flow pattern of the Sonoma Baylands Wetland Demonstration project.

KATHERINE GUELDNER and FRAN PACKARD, League of Women Voters of the Bay Area, letter dated April 30, 1994.

1. Both the Galbraith site and the Ninth Avenue Terminal facility are designed to prevent contamination of adjacent areas. Any contaminated sediments dried at the Ninth Avenue Terminal can be easily removed from the site. The current Galbraith facility overlies a former landfill that was not closed under the current rigorous standards. The placement of the dredged material on top of the old landfill will provide a better cap on the old landfill, and is designed to meet the RWQCB's requirements to protect ground and surface water quality.



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MEMORANDUM

As you requested, I have reviewed Florence and Philip LaRiviere's letter to Lt. Col. Cardoza dated April 26, 1994 in which they claim that the Sonoma Baylands restoration design is "unsupported by an adequate hydrologic assessment." The main basis for this claim appears to be their continued concern that the outboard marshplain would create a sill that would prevent tidal action within the Sonoma Baylands restoration site.

In two phone conversations with Mr. LaRiviere and in my earlier memo to you of April 13, 1994, I have explained the reasons why I am confident that we have made adequate provisions in the design and monitoring plan to ensure that tidal action will occur and that the site will evolve as rapidly as possible to a functioning tidal saltmarsh.

It is possible that the Citizens' Committee misunderstands the morphology and layout of the channels adjacent to the site. I attach an oblique aerial photograph that shows the layout of the slough channels adjacent to the pilot project site from the Petaluma River. A recent Corps survey shows the bed of the main channel is at about elevation 0.0 ft NGVD or 3.7 feet lower than the "sill" assumed by Mr. LaRiviere. This is the channel that will convey most of the tidal flow rather than the smaller mosquito ditch discussed in his letters. We expect that this channel to quickly deepen and widen once the levee was breached as has occurred on the Toy property nearby. In the unlikely event that rapid deepening and widening did not occur, we have made provision in the plan for artificially deepening the channel as a remediation measure based on post project monitoring. As you recall, the reason why we are using natural scouring instead of prior channel excavation is to address Fish and Wildlife Service concerns over potential impacts of construction equipment on the outboard marsh habitat.

There are some additional points concerning the hydrologic design raised in the letter which require a response:

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Environmental Hydrology Engineering Hydraulics Sediment Hydraulics Water Resources

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**Figure N-2
(Page 1 of 2)**

**RESPONSE BY PHILIP WILLIAMS & ASSOCIATES, LTD.,
TO LETTER FROM CITIZEN'S COMMITTEE TO COMPLETE THE REFUGE**

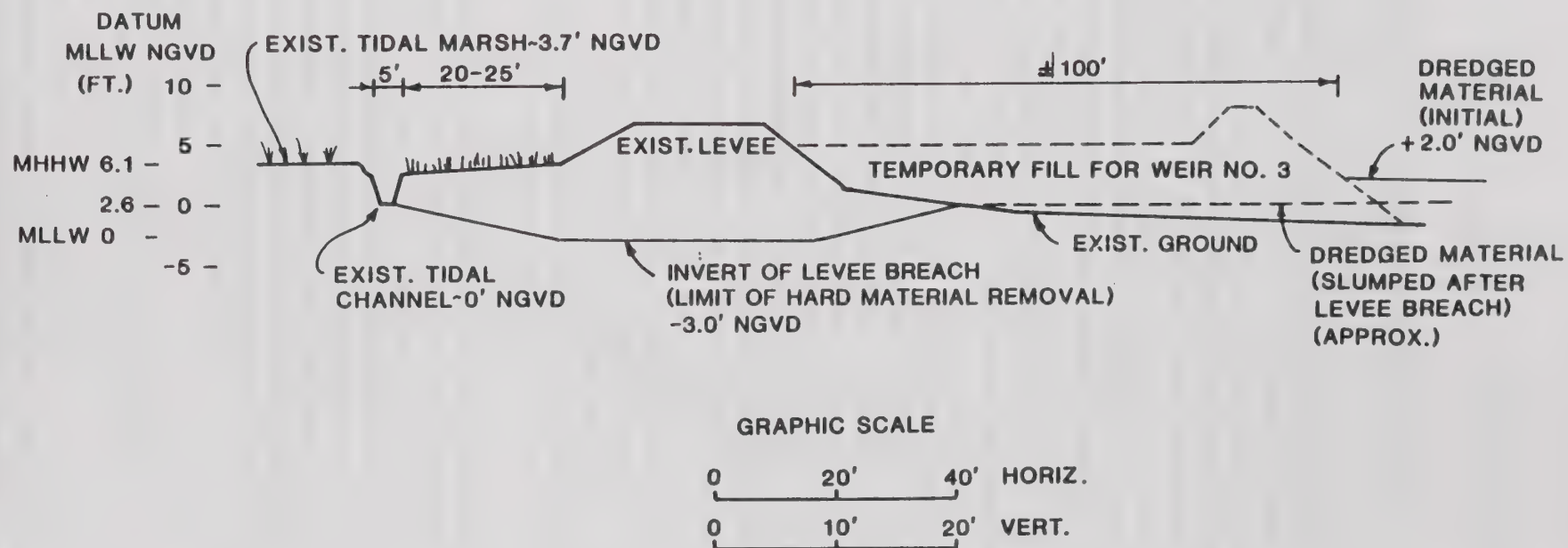
Philip Williams & Associates, Ltd.

- Roberts Landing Marsh Restoration. For this restoration design, PWA recommended the grading of a feeder slough channel to the restoration site. Unlike the Sonoma Baylands site, the restoration project is located on the East Bay shoreline where natural chenier ridges had formed comprised of sand and debris deposited on the marshplain. To connect with tidal inflow, a channel had to be excavated because no natural channel existed across these ridges.
- Hydraulic Discharge of Mud. Almost all of the dredged material would be fine silt or clay. These sediments are not "non-settling." Decanted water is likely to have lower turbidity than typical tidal flows in the Petaluma River.
- Effects of Tidal Prism on the Navigation Channel and Tidal Range. The relatively small tidal prism of the restoration compared with the much larger tidal prism of the Petaluma River makes it extremely unlikely that there would be any discernable affect on the navigation channel. There would be no affect on the tidal range. (At Tubbs Island the tidal prism of the Dickson Property restoration was larger than the tidal prism of Tolay Creek.)
- Other Examples of Restoration Projects. Analysis of Pond 3, Muzzi Marsh and the Faber Tract were carried out to learn from their experience, not to use them as justification of success. One key lesson learned was that the use of dredged materials could both create the right conditions and reduce the time frame for evolution of a tidal marsh. We determined that it was important to ensure that restoration criteria dictated the design rather than maximizing disposal volume. Unlike with these previous projects, this was the approach adopted for the Sonoma Baylands restoration.

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**Figure N-2
(Page 2 of 2)**

**RESPONSE BY PHILIP WILLIAMS & ASSOCIATES, LTD.,
TO LETTER FROM CITIZEN'S COMMITTEE TO COMPLETE THE REFUGE**



Source: U.S. Army Corps of Engineers, San Francisco District

Figure N-3

CROSS-SECTION OF THE LEVEE BREACH FOR THE PILOT UNIT,
 SONOMA BAYLANDS WETLAND DEMONSTRATION PROJECT

Responses to Comments on the Draft SEIR/S

2. This comment states that the Leonard Ranch and Montezuma Wetlands sites would be unsuitable for most uses other than industrial uses if they were contaminated. If either of these sites were proposed for disposal, this use would have to be consistent with RWQCB permit conditions that would include measures to prevent surface water and groundwater contamination. Neither site is part of the proposed project.
3. The Port recognizes the economic value of its land. Indeed, the implementation of the 42-foot project will require the Port to lose income from the lease of the Ninth Avenue Terminal (if required for the project), and theoretically the Galbraith Golf Course (although the Port has not received rent from the property since 1987). However, the Port is willing to accept this temporary loss of income because of the overwhelming economic benefits of the project both to the Port and the greater Bay Area economy.
4. See response to P&D Environmental comment #19.
5. The RWQCB will issue discharge requirements for the decant water from any of the upland disposal options. Currently, the RWQCB is considering requiring a National Pollutant Discharge Elimination System (NPDES) point source discharge permit. The discharge requirement will most likely be based on current acceptable water quality standards for marine waters, ambient water conditions, or a mixture of both. Initial testing of the decant will be required before the water can be discharged. During prolonged discharges, samples will be drawn and analyzed as required by the RWQCB in the NPDES permits. Daily testing for suspended solids, the source of most of the contaminant potential, may be required by the Board. The Port of Oakland or its consultants will collect samples. Analysis will be performed by an accredited commercial analytical laboratory and reported to the RWQCB by the Port. Self-monitoring programs are standard practice under the NPDES program. See also response to League of Women Voters comment #2, and Marin Audubon comment #22.
6. See revised section 2.7.7 of the SEIR/S and response to Department of the Interior comment #1.
7. See the response to Department of the Interior comment #1 and EPA comment #21. In addition, a diagram is provided in Figure 2.7.6-2.
8. There is no existing side wall or subsurface containment around the old debris landfill beneath the Galbraith Golf Course. The current design concept for the perimeter containment dikes incorporates a subsurface slurry cut-off wall that will completely encircle the site and intercept groundwater migration through the old debris landfill. In addition, the dredged material itself, once it has dried sufficiently, has a very low permeability and will serve as a liner over the existing landfill beneath the site.
9. Dredged materials would be left on the Galbraith Golf Course for up to 7 years. See also response #8 above.
10. In order to complete the pumping and unloading phase of the project in time to meet the agreements with the City of Oakland, the Port intends to operate the unloading and pumping equipment 24 hours a day. Measures will be taken to avoid significant noise impacts, such as

1 locating the equipment sufficiently far away from sensitive receptors or muffling the equipment
2 (see section 4.6.4.6).
3

- 4 11. a. The Ninth Avenue Terminal facility is currently a viable break-bulk shipping enterprise.
5 The upland handling facility at Ninth Avenue would only be constructed as a necessary
6 step to completing the 42-foot channel deepening project. The loss of 9 acres from this
7 facility will financially impact both the tenant and the Port. The Port would return the
8 facility to full marine terminal operations as soon as possible.
9
- 10 b. Refer to expanded section 2.7.7 in the SEIR/S. Note that the Ninth Avenue Terminal
11 has been used for industrial uses since the turn of the century. None of the sediment
12 quality analyses for this project has detected levels of contaminants above the hazardous
13 threshold concentration. The material, though unacceptable for aquatic disposal, is not
14 severely contaminated. The concerns regarding the dredged material contaminating the
15 site are not warranted.
16
- 17 c. As previously stated, the Port will be returning the site as soon as possible to a fully
18 functioning marine terminal.
19
- 20 d. Remediation would be required only if the site is contaminated by the dredged material
21 or the decant water. The site management and design has been developed to minimize
22 or eliminate the chance of site contamination (see section 2.7.7 in the SEIR/S.) The site
23 would be restored to its original condition and function as soon as the project is
24 complete.
25
- 26 e. The site would be restored upon completion of the landfill disposal (if required at all).
27
- 28 12. Please refer to the revised section 2.7.7 for additional information on the proposed design
29 features of the Ninth Avenue Terminal site.
30
- 31 13. a. Please refer to the expanded description in section 2.7.7 in the SEIR/S. In short, the
32 Ninth Avenue site will be completely sealed, and the permeability of the surface of the
33 site will be in the range of 10^{-6} cm/sec. Only decant water has a possibility of
34 percolating into the site soils. The levels of dissolved contaminants in the decant water
35 are expected to be quite low. The settling column tests conducted on dredged materials
36 have shown that the water will actually accumulate on the surface of the dredged material
37 rather than percolate through the sediment. It is highly unlikely that the decant water
38 would penetrate the asphalt and concrete and then contaminate the underlying soil. The
39 permeability of the terminal will be quite low once the cracks are sealed with a sealer
40 coating of asphalt.
41
- 42 b. Please refer to the expanded description in section 2.7.7 in the SEIR/S.
43
- 44 c. Please refer to the expanded description in section 2.7.7 in the SEIR/S.
45
- 46 d. The site is proposed to be used only for the duration of the drying of sediments requiring
47 landfill disposal for the proposed project. (Note that the RWQCB has determined that

Responses to Comments on the Draft SEIR/S

landfill disposal will not be required provided their concerns are addressed for the Galbraith facility.) Exact dates and deadlines are not available at this time. The Port's estimate for the length of time the facility would be used for upland rehandling is approximately nine months, exclusive of construction and post-project cleanup phases.

e. Terminals have in the past been affected by seismic activity, especially the Loma Prieta earthquake. The effect of the earthquake on the terminals was subsidence, but very little cracking of the asphalt/concrete surfaces occurred. It is highly unlikely that seismic disturbance would crack the surface and compromise the integrity of the facility.

f. Visual inspections of the seams and seals will be conducted on a daily basis. With surface permeability in the range of 10^{-6} cm/sec, the low concentration of soluble contaminants, and the short duration that material will be on the site, groundwater monitoring is not warranted.

g. See response (f) above.

h. None of the dredged material has been determined to contain contaminants at hazardous concentrations. The Ninth Avenue site will be cleaned up by a mixture of high pressure washing and sweeping to remove any remaining sediment before the site is returned to the tenant. The collected sediment will be disposed at one of the landfills. Berms made of geotextiles and sediment will be removed to the landfill. K-rail sections will be cleaned, disassembled, and retained for other uses.

14. A portion of the dredged materials will be placed on the pile-supported wharf. The load capacity of the wharf was investigated and found to be adequate to support the proposed load that would be imposed by the placement of the dredged materials.

15. A system of groundwater monitoring wells will be placed around the Galbraith drying facility and will be used to detect whether the project is causing levels of contaminants in the groundwater to exceed applicable water quality standards. If monitoring does show that standards are being exceeded, then the Port will implement a contingency plan to investigate the cause and for alternatives to prevent further groundwater degradation. Problems causing a failure to meet water quality standards for groundwater could include an unexpectedly high buildup of hydraulic pressure within the former landfill or a defect in the cutoff wall. Once the cause of the problem is identified, the Port would work with the Regional Water Quality Control Board to correct it, thereby mitigating further groundwater degradation.

Surface water discharges from the drying facility at Galbraith will also be monitored for compliance with applicable standards. If monitoring shows that the discharge does not meet RWQCB standards, discharge would be slowed and/or treated in vegetative control areas.

Similar surface water discharge monitoring may be required at Ninth Avenue Terminal and Sonoma Baylands sites.

The RWQCB will review both the results of surface and groundwater monitoring, and has the authority to require the Port to conduct further assessment. If the assessment shows that project

impacts have caused levels of contaminants above regulatory thresholds, the RWQCB can require the Port to remediate the off-site areas that have been impacted.

16. Potential impacts on the eelgrass beds are described in section 4.4.5.3. Accurate disposal is addressed in the response to comment #22 from Golden Gate Audubon Society. As the BFBA is not part of the Selected Plan, detailed site-specific control measures have not been developed.
17. As the biota of the BFBA is similar to that of the surrounding Bay, disposal there would have no effect on species diversity in the Bay. Following disposal, a biological community would become re-established. Under the current plan, historical elevations would not be restored.
18. The Galbraith alternative is a dredged material disposal site. The Sonoma Baylands alternative is a wetlands restoration project that would use dredged material to accelerate restoration to tidal wetlands. See response to U.S. Fish and Wildlife Service specific recommendation 2. a. on page 7 of Appendix H in the FSEIR/S. Also (reference *Final Demonstration Project Report and Environmental Assessment for the Sonoma Baylands Wetland Demonstration Project*, dated April 1994, San Francisco District, U.S. Army Corps of Engineers), while no compensation for the conversion of seasonal wetlands to tidal wetlands is proposed, the California State Coastal Conservancy stated its intent to increase the seasonal wetland acreage on the 830-acre parcel held by the Conservancy with the Sonoma Land Trust. The Conservancy's proposed actions include the creation of 24 acres of seasonal wetlands on the Sonoma Baylands site in the setback area between the proposed peripheral levee and the existing peripheral drainage channel, as well as the creation of seasonal wetlands on much of the northern 250-acre parcel (Coastal Conservancy letter to the U.S. Fish and Wildlife Service, dated March 17, 1994).
19. "Local" is defined as the Bay Area. As shown in Table 4.7.3-1 on page 4.7-2 in the FSEIR/S, direct jobs would increase from 6,700 to a high of 8,400; induced jobs would increase from 2,900 to a high of 3,600. The kinds of new jobs provided are projected as follows:

<u>Job Type</u>	<u>Projected Additional Direct Jobs</u>
Railroad	370
Trucking	790
ILWU (longshore)	240
Towing	20
Pilots	10
Warehousing	240

The proportion of Oakland residents in each job category is projected to remain the same as in 1991, i.e., 20 percent of direct employment.

20. The analysis has been revised to conclude that the loss of the Galbraith Golf Course would result in significant, unmitigable recreational impacts. The Port's review of other nearby golf courses has indicated that greens fees are roughly comparable to those of the Galbraith course, but that the other courses are already at or near playing capacity on weekends. Therefore, they would not be able to absorb additional golfers who would typically patronize the Galbraith course. Creating another golf course is not an economically feasible option given the seven-year period

Responses to Comments on the Draft SEIR/S

the Galbraith course would be unavailable. It should be noted, too, that identifying a suitable site, performing the necessary environmental review, obtaining permits, and constructing a golf course is a lengthy process. This SEIR/S has analyzed use of a number of disposal options and has concluded that the alternative including use of the Galbraith Golf Course is environmentally superior (see section 7).

21. The mitigation monitoring and reporting plan is described in Appendix J of the SEIR/S.

BARBARA SALZMAN, Chair, Conservation Committee, Marin Audubon Society, letter dated April 30, 1994.

1. The Corps' "with" versus "without" project analysis does not indicate an increased number of container ships calling at Oakland Harbor due to the dredging. However, the Port analysis indicates that after completion of the proposed project, vessel calls at the Port will increase by approximately one vessel per week. This represents an increase of 0.04 percent in container ship calls over existing conditions.

2. The potential for increased oil spills and collisions in port does not differ between the "without" and "with" project conditions. See response #1 above. The "with" project condition allows for a more efficient utilization of those vessels calling at Oakland by being able to maximize the number of containers each vessel is designed to carry. There is no inherent correlation between the increased number of containers on a vessel and increased vessel collisions, assuming the vessel is loaded to its design standards. Also, as a point of information, container sizes are standardized and are not expected to increase in size.

3. Mare Island is being investigated by the LTMS Management Committee and the City of Vallejo as an option. The Corps of Engineers has received Federal Reconnaissance Phase study funding for Leonard Ranch. The Leonard Ranch reconnaissance level study is scheduled to start in August 1994. Other sites will be considered in these studies.

4. The FEIR/S contains additional information on the monitoring programs for the recommended plan. The mitigation monitoring and reporting plan is presented in Appendix J.

5. See the response to Golden Gate Audubon Society comment #29.

6. The proposed monitoring plan for the ocean site, as described in sections 4.2.7.1, 4.3.4.1, 4.4.5.1, and Appendix J, will be fully adequate to determine the impacts of disposal at the site and to indicate any need for modifications in management of the site. The mitigation monitoring and reporting plan for the entire proposed project is presented in Appendix J.

7. As discussed in section 4.4.5.2, disposal at the Alcatraz site is expected to cause temporary displacement of feeding by marine birds to nearby areas, but no significant long-term impacts on the species are expected. The Alcatraz disposal site has both monthly and annual volume restrictions and, for reasons stated in section 7 of the FSEIR/S is *not* included in the Oakland Harbor project recommended plan. Thus there will not be any impacts to Alcatraz from construction of the Oakland project.

- 1 8. Only dredged material that has been deemed suitable for unconfined aquatic disposal, based on
2 chemical, toxicity and bioaccumulation tests, would be disposed at the Alcatraz site. As
3 discussed in section 4.4.4.2, the results of these tests indicated that no significant bioaccumulation
4 of toxic chemicals would occur for marine species (or their predators such as birds and
5 mammals).
6
- 7 9. The fate and transport of material from Alcatraz is currently being studied by the LTMS. This
8 work consists of two studies: (1) field/modeling efforts to predict the final deposition of dredged
9 material discharge (a final draft is anticipated in July 1994); and (2) a field program to quantify
10 natural suspended concentrations in central San Francisco Bay (this study is in year 3 of a 4-year
11 program).
12
- 13 10. The Sonoma Baylands site consists of approximately 55 acres of jurisdictional seasonal wetlands
14 that are highly disturbed due to agricultural operations on the site. As stated in the FSEIR/S
15 (section 3.4.3.5), "Relatively few migratory waterfowl and shorebirds were recorded on site
16 during a 1982 to 1989 census (USFWS 1992). The census showed that only 19 percent of the
17 birds observed on site were shorebirds and 2 percent were waterbirds."
18

19 The Fish and Wildlife Service used three Habitat Evaluation Procedure (HEP) species/guild
20 models to evaluate changes in seasonal wetland values due to the Sonoma Baylands Wetland
21 Demonstration Project. For two of the HEP seasonal wetland evaluation species, the wintering
22 shorebird guild and the egret guild, the proposed restoration project would result in substantial
23 gains in habitat value. The only HEP seasonal wetland evaluation species for which the Service
24 calculated a loss of habitat value was wintering mallard. The Service calculated a loss of 6.85
25 average annual habitat units (AAHUs) for the wintering mallard, which was the smallest change
26 for any of the six evaluation species used in the overall HEP.
27

28 Although the HEP model used by the Service for the wintering mallard assigns a habitat value
29 to marshes, as well as to seasonal wetlands, the Service decided not to use the wintering mallard
30 model in calculating the habitat value of the tidal salt marsh which would be restored at Sonoma
31 Baylands. Using the Service's wintering mallard HEP model and the Service's assumptions
32 regarding the progression of the marsh restoration, the Corps has calculated that the restored tidal
33 salt marsh would provide approximately 158 AAHUs for wintering mallards. These 158 AAHUs
34 were disregarded by the Service. The proposed restoration project would, therefore, actually
35 provide a substantial net increase of approximately 151 AAHUs for wintering mallards, rather
36 than the small decrease calculated by the Service.
37

38 The only functional value that the Service has identified for seasonal wetlands on the Sonoma
39 Baylands site that would not be provided by restoring tidal wetlands is resting and feeding habitat
40 for migratory waterbirds during high tide and storm events. There are abundant alternative
41 seasonal wetland resting and feeding areas for migratory waterbirds adjacent to the Sonoma
42 Baylands site. The loss of high tide resting and feeding habitat at the Sonoma Baylands site
43 would affect migratory waterbird populations only if there is a future significant loss of other
44 nearby seasonal wetlands. Existing Federal, State, and local laws, regulations, and policies are
45 expected to prevent significant future losses of seasonal wetlands in the North Bay. Therefore,
46 the loss of high tide resting and feeding habitat at Sonoma Baylands is not expected to have a
47 substantial adverse effect on migratory waterbird populations. As indicated by the Service's HEP

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analysis, the Sonoma Baylands Wetland Demonstration Project will result in substantial net gains in both wetland acreage and wetland habitat value. Therefore, compensation is not considered necessary for the restoration of the degraded former tidal wetlands on the Sonoma Baylands site to their original condition.

11. The Conservancy's concept of creating 24 acres of seasonal wetland at the Sonoma Baylands site, as well as the creation of seasonal wetlands on much of the northern 250-acre parcel, has not yet been developed into a detailed plan to address mitigation for potential human and pet disturbances.
12. While no compensation for the conversion of seasonal wetlands to tidal wetlands is proposed either by the Corps' Sonoma Baylands Wetland Demonstration Project or the Oakland Harbor Navigation Project, the California State Coastal Conservancy has stated its intent to increase the seasonal wetland acreage on the 830-acre parcel held by the Conservancy with the Sonoma Land Trust. The Conservancy's proposed actions include the creation of 24 acres of seasonal wetlands on the Sonoma Baylands site in the setback area between the proposed peripheral levee and the existing peripheral drainage channel, as well as the creation of seasonal wetlands on much of the northern 250-acre parcel (Coastal Conservancy letter to the U.S. Fish and Wildlife Service, dated March 17, 1994). The Conservancy's concept of creating 24 acres of seasonal wetland at the Sonoma Baylands site, as well as the creation of seasonal wetlands on much of the northern 250-acre parcel, has not yet been developed into a detailed plan. Implementation of the Conservancy's plan would be subject to all the appropriate agency and public review processes.
13. No *Grindelia* were found on the site as part of the Fish and Wildlife Service-conducted Habitat Evaluation Procedures (HEP) interagency field sampling effort nor in the HLA (1993c) survey of the area. However, *Grindelia stricta* var. *angustifolia* was observed in the salt marsh immediately south of the Sonoma Baylands site. The Fish and Wildlife Service's Oakland Harbor Navigation Improvement Project updated Species List (dated February 1, 1994) of plants that may occur in the Sonoma Baylands disposal site area did not contain the gumplant (*Grindelia*) candidate plant species.
14. Any wetland that is formed by the deposition of sediment from San Pablo Bay, whether by natural forces or by the placement of recently deposited sediment from a navigation channel, including Oakland Harbor, will likely exceed the RWQCB screening criteria. Sediments from the Petaluma River channel tested in 1976 had an average mercury content of 0.4 mg/kg (dry weight). These data suggest that the ambient concentration of mercury in local sediments may have been fairly constant over the past two decades. Because the surface soil of the restored wetlands on the Sonoma Baylands Demonstration Project site will be formed by the deposition of suspended sediment from San Pablo Bay, there is no reason to use the Oakland Harbor dredged material for cover of the Corps' Sonoma Baylands Wetlands Demonstration Project pilot unit.
15. See response to comment #2 of the Golden Gate Audubon Society letter, dated April 29, 1994.
16. The release of sediments from the restoration site will be controlled to meet water quality standards by limiting the rates of discharge into and out of the site through limiting the maximum dredge or pump size and managing the discharge weir elevations.

Once tidal action is returned to the restoration site, any dredged material within the site and the edges of the existing marsh channels between the site and San Pablo Bay will be susceptible to erosion from tidal circulation. Some dredged material will be suspended by tidal currents and transported from the restoration site on ebb tides. However, since the restoration site will be purposely filled to an elevation that is lower than the equilibrium marsh elevation, the interior of the restoration site will become a sediment trap. The small existing channels across the outboard marsh are expected to erode and increase in size to accommodate the tidal prism of the restoration site. Sediment eroded from these channel sides will be transported into San Pablo Bay and the restoration site. No measurable impact on turbidity levels in San Pablo Bay is anticipated through the restoration of tidal action to the site. Levee slopes and other areas outside the tidal restoration area disturbed during construction will be seeded with native grasses to minimize erosion. Also, prior to tidal restoration, storm runoff will be contained within the tidal restoration area and will not have an effect on off-site water quality.

Section 106 WRDA '92 specifies that the final phase of the Sonoma Baylands Wetlands Demonstration Project will include monitoring. The Sonoma Baylands monitoring plan will include evaluation of the following wetland attributes: hydrology, topography, water quality, contaminant mobility, soils, and biota. The degree to which each element is monitored will depend on the importance of data on each attribute.

The LTMS Reuse/Nonaquatic studies workgroup has been tasked to produce a model monitoring program for future wetlands restoration. The Sonoma Baylands site has been selected as the design site for the model program. The LTMS workgroup tasking states, "The program for the [Sonoma Baylands] site will be designed to monitor 1) site colonization by tidal marsh vegetation and benthic organisms; 2) use by fish and wildlife, with a focus on threatened and endangered species; 3) critical physical determinants of habitat success, including fill elevations, evolution of tidal drainage systems and hydroperiods, rates of natural sedimentation, rates of erosion, and material consolidation/site subsidence; 4) chemical changes; and 5) contaminant transport through local organisms and food-chains over time." The final monitoring plan will include both physical and biological success criteria and will be completed prior to the restoration of tidal action to the pilot unit. Monitoring of the project will be performed until all of the success criteria in the monitoring plan have been met, or until the Corps and Conservancy mutually agree that monitoring is no longer required. The monitoring period is estimated to be 20 years.

With respect to remediation, Section 106 WRDA '92 includes "remediation if necessary" as part of the final phase of the Sonoma Baylands Wetland Demonstration Project. At this time, no need for remediation is anticipated. The need for remediation will be determined by periodically comparing the results of the monitoring program to the success criteria for physical functions in the monitoring plan. Remediation would be limited to instances in which corrective actions are needed in order for the project to fulfill the success criteria for physical functions. If the monitoring results indicate a need for remediation, any such corrective actions would be coordinated with the appropriate federal, state, and local agencies. Remediation actions would be funded under, and cost-shared in accordance with, Section 106 WRDA '92.

17. See response #16 above.

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18. The Leonard Ranch alternative dredged material disposal site is not included in the Oakland Harbor project recommended plan and has been eliminated from consideration for the reasons stated in section 7 of the FSEIR/S.
19. See response #16 above.
20. The Port of Oakland has entered into a Memorandum of Understanding (MOU) with the City of Oakland in which the Port has committed to constructing a "first class" golf course on the Galbraith site once the dredged material is sufficiently dry. The MOU allows for interruption of the golf course use for 7 years, but time extensions are possible if the dredged material drying takes longer than anticipated.
21. See response to EPA comment #21 for a description of the cutoff wall. The cutoff wall will attenuate the lateral migration of contaminants contained within the landfill fluid. The clay particles in the cutoff wall will adsorb or attract contaminants in the landfill fluid. Concentrations of contaminants leaving the landfill and entering the groundwater outside the facility would thereby be reduced. See Figure 2.7.6-2 for a typical dike section.
22. If the RWQCB-mandated groundwater monitoring system shows that the placement of dredged materials at Galbraith is increasing contaminant levels off site above applicable water quality standards, the Port will (1) identify the reason that elevated levels of contaminants are moving through the cutoff wall (e.g., an unacceptable increase in hydraulic pressure within the landfill, weakness in some portion of the cutoff wall); (2) prepare a work plan to be approved by the RWQCB that identifies action that the Port will take to correct the problem; and (3) implement corrective measures.
- RWQCB-mandated decant water monitoring results will show whether levels of contaminants exceed applicable water quality standards set forth by the RWQCB. If the decant water exceeds these standards, the rate of discharge from the drying ponds can be slowed, thereby increasing the effectiveness of settling and treatment within the two vegetative control areas. The rate of dredged material discharged to the ponds can also be reduced to allow more settling time.
23. See response #22 above.
24. Potential adverse impacts to soil from the accumulation of metals will be limited to the containment facility since the subsurface cutoff wall will attenuate the level of contaminants leaving the site. Therefore, the project will not adversely impact the Bay or a drinking water source by releasing elevated levels of metals. In the long term, the 1- to 2-foot layer of topsoil over the dried dredged material will function as a buffer between the material and the environment. The top soil will be adequate to support the vegetation for the golf course. Soil dwelling organisms will colonize the imported topsoil, but will avoid the dredged material because of its depth and salinity. To minimize potential health impacts, future golf course workers conducting maintenance activities will be advised to take ordinary precautions to minimize exposure such as washing their hands after doing subsurface work.
25. The Port and its contractor will inspect the dikes and weirs regularly to ensure that they are functioning properly. If these structures are damaged, the Port will fix them immediately. The

RWQCB Waste Discharge Requirements for this project will require a regular inspection and maintenance program to ensure the facility, including the dikes and weirs, functions adequately.

26. Avoiding the eastern portion of the site would cause a significant reduction in capacity, and therefore is not feasible. The cutoff wall will mitigate fresh water impacts due to its capacity to attenuate the subsurface liquids that may move off site. Although permeable native materials are present underneath this portion of the landfill, it is unlikely that vertical migration of fluids from the debris material would occur since it is separated from the permeable materials by 5 to 24 feet of impermeable silty clay.
27. Stormwater runoff will be retained within the ponds and discharged only through the weirs at specific discharge points. The runoff will be sampled and analyzed for levels of contaminants that are specified in the Port's Waste Discharge Permit. Regular inspections will be conducted by the Port, or its contractor, to ensure that the dikes and weirs are functioning properly. Inspections will include visual observation of the dikes for erosion caused by rainfall. The Port will repair eroded sections of the dike immediately.
28. Typical species that have either been observed or are expected to use the existing seasonal and freshwater wetlands at the Galbraith site include garter snake, western tree frog, mallard, gulls, Canada geese, and red-wing blackbirds. No special status species are known from this site (Harvey 1993).
29. The basis for estimating the noise impacts is discussed in section 4.6.4.6. The noise/distance calculation is based on worst-case noise levels taken from EPA (1971) and a standard formula used to calculate noise levels at various distances from a noise source. The calculation assumed no natural absorption of noise between the source and receiver and that there is no background noise greater than project-related noise, which are also worst-case assumptions. Background noise may very well be louder than project noise because of the proximity to the airport and industrial land uses; thus existing background noise would drown out the noise generated by the proposed project. Therefore, with the worst-case assumptions used in calculating the 2,000 foot distance, it is reasonable to assume that no noise impacts could occur to residences greater than this distance. Field measurements for this SEIR/S are not necessary because the noise levels are based on measurements conducted by EPA and worst-case assumptions used to calculate noise levels at a distance.
30. The Galbraith Golf Course currently has a long-term agreement with EBMUD to use reclaimed water. See response to EBMUD comments. This water could be used for dust control measures. Regarding the dust mitigation, see response to City of Oakland Office of Parks and Recreation comment #1.
31. See response #20 above.
32. See revised section 2.7.7 of the SEIR/S for additional information on design and treatment measures at the Ninth Avenue Terminal site.

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33. Landfills do not accept free liquid for treatment or disposal, but they can accept solid fill that consists of up to 50 percent liquid. The major concern is the cost of hauling away equal volumes of water and soil when disposal costs are based on tonnage.

A landfill's acceptance requirements are based on the degree of attenuation within the landfill; whether the landfill is lined to prevent liquids from leaving the site; and the location, use, and potential uses of the groundwater aquifer. The landfill determines the level of contaminants that can be safely disposed on its property. The RWQCB and Integrated Waste Management Board determine if the acceptance thresholds are adequate to protect the surrounding environment.

Class III landfills typically can accept soil from leaking fuel storage tank sites within limits. The individual constituents of waste oil and fuels from these sources can be many times higher than in the dredged materials. Based on landfill acceptance requirements and the sediment test results, several landfill operators have indicated that they would be able to accept the material. Dredged materials have already been accepted at the Redwood Landfill (Class III) in Novato, and the Port is currently negotiating with the BFI Vasco Road Landfill (Class III) in Livermore to accept dredged material from an unrelated project. Because Class II landfills can accept contaminants up to hazardous concentrations, the dredged material would also be acceptable at these facilities.

The Port of Oakland circulated a questionnaire to over 20 commercial sanitary landfills inquiring whether each would be able to accept dredged sediments that could be dried at the Ninth Avenue Facility. Of the landfills that responded favorably, three landfills were selected and evaluated in the SEIR/S as potential suitable disposal sites for the dredged sediments. The three landfills are West Contra Costa Landfill in Richmond, Vasco Road Sanitary Landfill in Livermore, and the East Carbon Development Corporation Landfill in Carbon County, Utah. See section 2.7.7 of the SEIR/S.

34. See response to League of Women Voters comment #5.

35. If required, the Ninth Avenue site would be used as a rehandling facility for approximately one year. The proposed facility is currently only planned to be used to dry sediments from the channel deepening project (if required). Since no significant adverse environmental impacts have been identified with the use of the facility, it could be used if needed to dry sediments from other projects subject to permit requirements. However, the site is an operating marine terminal for break bulk products. It is the Port's intention to retain the site as an operating terminal and minimize disruption to that operation.

36. See revised section 2.7.7 of the SEIR/S.

37. See the revised section 2.7.7 for additional information on the proposed design features of the Ninth Avenue Terminal site.

38. See response to League of Women Voters comments #11d and #13a.

39. The sediment will be transported off the site before it is dry enough to generate fugitive dust, therefore water will not be needed to control airborne dust.

- 1 40. The description of the eelgrass community in section 3.4.3.3 has been augmented with
2 information provided by Dr. C. Kitting of California State University Hayward. As discussed
3 in that section, the biota of the borrow pit itself is typical of areas of the Bay with similar
4 sediment types. Therefore, filling the pit would not change species diversity in the Bay.
5
- 6 41. There is no evidence that the borrow pit has adverse effects on any species.
7
- 8 42. Dispersion modeling using the Disposal From Instantaneous Dump (DIFID) module of the Short
9 Term Fate (STFATE) of dredged material disposal was performed for material proposed for
10 disposal at the Bay Farm Island Borrow Area. DIFID simulates the initial deposition phases of
11 barge-dumped dredged material and calculates that portion of the material which is transported
12 from the site by ambient currents and the portion that was deposited within the disposal site.
13
- 14 "Initial deposition" refers to the location of material as it first strikes the bottom without
15 consideration of any further transport or resuspension. "Short term" refers to a period of time
16 from a few minutes to a few hours, depending on the circumstances of the disposal. The model
17 also provides information on potential water column impacts by comparing concentrations of
18 dredged material in the water column to 1 percent of the LC50 concentration. When the
19 concentration of dredged material exceeds 1 percent of the LC50 outside the mixing zone, the
20 material is in violation of standards proposed for in-Bay disposal of dredged material.
21
- 22 The Bay Farm Island Borrow Area has been eliminated from further consideration in the Oakland
23 Harbor project for reasons as stated BCDC's comment letter (see comment #12), as well as
24 reasons stated in the EPA's comment letter (see comment #35) and in section 7 of the FSEIR/S.
25
- 26 43. See the last paragraph in response #42 above. As discussed in sections 4.2.7.3 and 4.4.5.3, the
27 available information indicates that significantly higher levels of suspended solids are not expected
28 in the eelgrass beds as a result of disposal at BFBA. No related adverse effects on the eelgrass
29 beds are expected.
30
- 31 44. See response #43 above.
32
- 33 45. As discussed in sections 4.2.7.3 and 4.4.5.3, levels of suspended solids outside the disposal site
34 are not expected to increase substantially as a result of disposal (the limiting permissible
35 concentration based on toxicity tests would not be exceeded), and no adverse effects on fish,
36 mammals, or other marine species are expected.
37
- 38 46. A trench is not expected to be created. The disposed material is expected to achieve a
39 distribution and "natural" slope determined by gravity (slumping), characteristics of the material,
40 hydrodynamics of the area, and other factors. No related adverse biological effects are expected.
41
- 42 47. Comment noted.
43
- 44 48. Comment noted.
45
- 46 49. See response to Golden Gate Audubon comment #24.
47

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- 1 50. In its Diked Baylands Wildlife Study, the U.S. Fish and Wildlife Service made 38 visits to the
2 Leonard Ranch site (S21) between January 1982 and December 1989. During this period 8,988
3 birds were observed, including 6,841 passerine birds (76 percent), 1,669 shorebirds (19 percent),
4 282 raptors (3 percent), and 196 waterbirds (2 percent). The value of the site as feeding habitat
5 to migratory waterfowl and shorebirds was determined on the basis of limited forage availability
6 and not the number of birds observed. The relative proportions of waterfowl and shorebirds to
7 overall avifauna are consistent with the assessment in the SEIR/S.
8
- 9 51. See response #50 above.
10
- 11 52. The statements regarding the Biotic Resources Combining District and the Planning Director's
12 discretion do not apply to the Leonard Ranch site and have been deleted from the text. They do
13 however apply to a portion of the Sonoma Baylands site. Sonoma County has determined that
14 the Sonoma Baylands project is consistent with the Sonoma County general plan (see comment
15 letter from Sonoma County Department of Planning).
16
- 17 53. A detailed design that would allow precise response to many of the comments on the SEIR/S has
18 not been performed for the Leonard Ranch facility. See response to Golden Gate Audubon
19 comment #24.
20
- 21 54. The groundwater at the Leonard Ranch site is between 5 and 14 feet below the ground surface.
22 If the Leonard Ranch site becomes a viable option for dredged material drying in the future, the
23 project proponent would formulate more detailed design plans. Since this site is not the preferred
24 alternative for this project, only conceptual plans have been developed to date. See response to
25 Golden Gate Audubon comment #24.
26
- 27 55. If the Leonard Ranch drying site becomes a viable option in the future, specific effluent controls
28 would be designed and implemented to ensure site effluent meets water quality standards.
29
- 30 56. See response #55 above.
31
- 32 57. The need for specific treatment measures has not been investigated for the Leonard Ranch
33 rehandling site since it is not included in the recommended plan (see response to Golden Gate
34 Audubon comment #24). In the future, if it becomes a viable option, a review of sediment
35 quality will be required to adequately assess the need for and design of effluent treatment and
36 control measures.
37
- 38 58. The RWQCB would issue Waste Discharge Requirements for the Leonard Ranch rehandling
39 facility that would require effluent to meet applicable water quality standards at the point of
40 discharge into the drainage channel. Therefore, unless the drainage channel was specifically
41 developed as a treatment channel, the water entering the channel would meet water quality
42 standards.
43
- 44 59. See response to Golden Gate Audubon Society comment #24.
45
- 46 60. No background data were collected for Leonard Ranch since this is not part of the recommended
47 plan. See response to Golden Gate Audubon Society comment #24.

61. An operations and maintenance plan has not been formulated for the Leonard Ranch rehandling facility since it is not part of the recommended plan. See also the response to Golden Gate Audubon comment #24.
62. The average expected dissolved tributyltin (TBT) level will be just under 0.03 micrograms/liter. Tributyltin degrades in estuarine waters in 3 to 13 days (Lee 1989). For the Galbraith Golf Course, the average detention time for excess water will be 14 days. Therefore, the effluent should not contain elevated levels of tributyltin when it is discharged from the drying facility. If monitoring of the effluent shows that the levels of tributyltin are elevated, the water can be held in the ponds for a longer period of time to allow for degradation to meet discharge standards issued by the Regional Water Quality Control Board.
63. See response #61 above.
64. Best Management Practices would be formulated along with further site design at the time when this site becomes a viable option. See also the response to Golden Gate Audubon comment #24.
65. See the response to Golden Gate Audubon comment #24 regarding the basis for selection of the Galbraith site rather than Leonard Ranch as a drying site. The concerns raised by this commentor for mitigation of seasonal wetland losses are one of the factors considered in the decision to exclude the Leonard Ranch disposal option as part of the selected plan. Section 4.4.5.4 indicated that selection of Leonard Ranch would involve filling of 31 acres of wetlands, mostly seasonal ponds, and proposed restoration of 161 acres of seasonal wetlands on the adjacent land and on Conservancy lands north of Highway 37.
66. During site visits to drying ponds at Port Sonoma-Marin, Port staff did not observe substantial numbers of shorebirds. In contrast, large numbers of shorebirds are present at the San Leandro drying facility because the facility is managed, in part, to enhance habitat. The presence of shallow water rather than dredged material appears to be the critical factor for attracting shorebirds. If Leonard Ranch were selected, drying procedures to minimize the presence of ponding water would be necessary to prevent attraction of shorebirds. Also, see response #6 to Department of the Interior, Office of Environmental Policy and Compliance letter.
67. The potential visual impacts of this alternative are discussed in section 5.3.4.2. The containment levee does have a potentially significant visual impact (described in Appendix F) and is in potential conflict with the Sonoma County General Plan.
68. The noise impacts have been studied and are discussed in section 4.6.4.4. No significant noise impacts are expected.
69. See response to Golden Gate Audubon comment #24.
70. Comment noted. For reasons stated in section 7 of the FSEIR/S, the Montezuma Wetlands alternative disposal site is not considered as part of the Oakland Harbor Project recommended plan.
71. Comment noted. See response #70 above.

MARY C. WARREN and RADM R.L. TONEY, USN (Ret), Oakland Chamber of Commerce, letter dated April 18, 1994.

1. This comment indicates support for the proposed project. Comment noted.

ALAN K. BEALES, Sabre Yacht Association, letter dated March 15, 1994.

1. The Port initially considered use of Frank's Tract for disposal of sediments dredged from the Oakland Inner Harbor channel to -38 feet (Tetra Tech Inc. 1990). The Port found through that effort that the Central Valley Regional Water Quality Control Board's policies preclude importation of saline dredged sediments into the freshwater environment of the Delta. Therefore, this alternative is not feasible for the present project.

MARK L. SHAFER, President, San Francisco Bay Area Chapter, National Defense Transportation Association, letter dated April 26, 1994.

1. This comment indicates support for the proposed project. Comment noted.

DAVID NESMITH and DAVID TAM, Sierra Club, San Francisco Bay Chapter, letter dated May 2, 1994.

1. The Port and Corps have considered landfill disposal for dredged material from this project. However, several factors preclude this disposal option for all but sediments that require this degree of confinement (as determined by the RWQCB).
 - a. The sediments are expected to be composed of 30 to 80 percent solids when dredged. Since landfills are generally restricted to accepting material at 50 percent solids or greater, a shoreside drying site would be necessary to dry the material before transport to a landfill. Drying 1.2 million cy of sediments sufficiently for trucking and landfill acceptance would require a very large drying site, and considerable time.
 - b. The double handling required for landfill disposal would increase project costs well in excess of the costs of drying and use of the materials at the Galbraith site. The Corps has estimated the costs for drying sediments at the Ninth Avenue terminal, trucking to a Class III landfill and tipping fees at the landfill at approximately \$70/cy. This figure exceeds the costs of use of the Galbraith facility (at \$7.50/cy), even including reconstruction of the golf course.
 - c. It is the policy of the California Integrated Waste Management Board to divert wastes from landfills that do not require landfill confinement and to promote beneficial uses of wastes. It would be inconsistent with State policy to occupy limited landfill capacity with sediments that do not require such measures as determined by the Regional Water Quality Control Board (RWQCB).

For these reasons, consideration of landfill disposal was limited to any sediments requiring this type of confinement as determined by the RWQCB. The RWQCB (see comment letter on the Draft SEIR/S) has indicated that all of the material that is unsuitable for unconfined aquatic

disposal would be appropriate for disposal at the Galbraith site, provided that four types of impacts at the Galbraith site are acceptably addressed. The Port is currently working with the RWQCB to resolve their concerns.

2. See response #1 above.

3. The Oakland Harbor Deepening project will *not* be the " . . . first user of the Ocean Disposal Site. . . ." The Navy disposed their Alameda NAS dredged material at the ocean disposal site in the 1992-1993 time period. The enclosures to the May 2, 1994 letter on the DSEIR/S from the Sierra Club San Francisco Bay Chapter (i.e., the National Heritage Institute letter to Alan Ota of the EPA, dated March 28, 1994, and the Sierra Club letter to the EPA, dated January 25, 1993) have been forwarded to the EPA, since the comments in these letters are within the purview of the EPA.

4. Figure 1.2-1 has been changed to label the Middle Harbor and Bar Channel areas, in response to the comment.

5. Section 2.6 describes the range of disposal options that were considered for this project, and the reason each was dropped from consideration. The response to Sierra Club comment #1 describes why landfills were eliminated from detailed study. The tipping fees for Class II landfills are greater than for Class III sites, thus the cost differential would be even greater. See the Moffatt & Nichol, Engineers report listed in the references section of the SEIR/S for a description of the LTMS disposal site ranking process. That document is available through the Corps and the BCDC.

6. See response to Sierra Club comments #1 and #5.

7. "Phase I dredged sediments" on page 1-5, line 42 of the DSEIR/S refers to sediments dredged during the Phase I portion of the Oakland Harbor Deep-Draft Navigation Improvement Project. The Phase I portion of the project consisted of deepening of portions of the Inner Harbor to -38 feet.

8. The San Francisco Bay Regional Water Quality Control Board (RWQCB) will make a determination on whether the dredged material proposed for disposal at the Galbraith drying facility is a designated waste under Title 23 of the California Code of Regulations. The determination will be made based on the character of the waste as well as the nature of the specific conditions at the disposal site. After the DSEIR/S was prepared, staff at the RWQCB indicated that the dredged material proposed for disposal at Galbraith may be designated based on the fact that it would initially contain greater than 50 percent moisture when it is delivered to the site, as well as the presence of metals at soluble levels of contaminants that could exceed water quality standards. The design for the Galbraith drying facility therefore includes engineering control measures that satisfy Title 23 of the California Code of Regulations, Chapter 15, which are intended to mitigate significant impacts to the environment. By installing a cutoff wall and monitoring system, the Galbraith facility is meeting the equivalent of Class II landfill standards. Dredged material is significantly different from landfill materials traditionally permitted under Title 14 of the California Code of Regulations. Title 14 describes the Local Enforcement Agency and the California Integrated Waste Management Board permitting authority

Responses to Comments on the Draft SEIR/S

and describes certain permitting requirement exemptions. There is precedence for exempting upland disposal of dredged materials since several other dredged material drying facilities operate in the Bay Area without having received a permit from the California Integrated Waste Management Board.

9. The "... LTMS regional plan objective of disposal of 400 mcy of dredged material from the San Francisco Bay Area ..." is a planning estimate from the Phase I LTMS document for 50 years at 8 mcy per year.

10. The Integrated Waste Management Board and the Environmental Health Board and others do participate as part of technical committees in LTMS under discussions of upland disposal.

11. The LTMS Technical Panel did not discuss upland canyon landfilling.

12. The focus of section 1 of the SEIR/S is the need for and objectives of the proposed action. Since the other existing projects are not central to the proposed action, they are discussed in section 10 (Cumulative Impacts).

13. LTMS has not ruled out upland canyon Class II landfill alternatives. However, Class II landfill disposal is generally more expensive than other options, and is inconsistent with state policy (see response to Sierra Club comment #1).

14. Comment noted.

15. The context of the quoted statement (i.e., "Ultimately, the choice of dredge will depend on cost-effectiveness") relates to the previous two sentences, which read: "Both clamshell and hydraulic cutterhead dredges could be used. Either type of dredge can be used on material suitable for unconfined aquatic disposal."

16. The DSEIR/S does include an economic and technical analysis of alternative dredged material land disposal sites, which include drying of the material (i.e., Galbraith, Port/Landfill, and Leonard Ranch). Note that the 67-83 percent water content applies only to sediments suitable for aquatic disposal dredged with a clamshell dredge. The loads filled with sediments unsuitable for aquatic disposal will likely have greater water content because of the prohibition against overflow.

17. See the response to Sierra Club comment #1. Dredged material disposal options were screened based on capacity, engineering constraints, ownership, and ability to receive material within the timeframe of the proposed dredging project.

18. See response to Sierra Club comments #1 and #5.

19. Current plans of the Port of Oakland do not include any additional parking at the Galbraith Golf Course. An earlier Airport Master Plan (1987-9) proposed that additional parking (2800 stalls) could be built at the Galbraith Golf course. However, this earlier plan has been abandoned and has been replaced by the 2002 Airport Development Program, which does not identify any airport parking at the Galbraith site. Furthermore, the golf course will be used as a disposal site for

several years, followed by the development of an improved golf course. The current Port plans for the Airport do not include parking at this site. Any parking use proposed in the future would be subject to environmental review. Therefore, the Galbraith proposal is not a growth-inducing impact of the -42 foot deepening project.

20. See the response to Sierra Club comment #5.

21. See the response to Sierra Club comment #5. Class II landfills are part of an array of disposal options under the LTMS.

22. The LTMS environmental review schedule for policy alternatives is a Draft EIR/S in July 1995, and a Final EIR/S in April 1996.

23. The typographical error has been corrected.

24. See response to Sierra Club comment #17.

25. Fourteen current and former landfills were included in the 1993 LTMS effort to screen potential upland disposal sites (Moffatt & Nichol 1993). However, the uses considered were landfill daily cover, or liner or capping material. The "Confined Disposal" category listed in the table in section 10.1 does not include disposal in Class II and III landfills as waste. For the reasons outlined in the response to Sierra Club comment #1, landfill disposal is not economical, nor a generally accepted use of limited landfill capacity. Thus, consideration of landfill disposal is usually limited to sediments that specifically require this type of confinement.

26. Please refer to the response to Sierra Club comment #19 regarding airport parking at Galbraith golf course. There are no ground transportation plans by the Port for the Galbraith Golf Course in the future. There are plans to construct a BART AGT (above ground transport) rail connection between the Airport terminal to the Oakland Coliseum BART station. Although just in the planning stages, the existing proposed alignment (above grade) will be on the eastern side of Airport Drive, on the edge of the Galbraith Golf Course. This project has not been funded but is in the preliminary feasibility and environmental stages.

Another transportation project planned in this area is the Airport Roadway. This project is part of the 2002 Airport Development Project. This project may require limited acreage along the eastern boundary of the Galbraith site.

27. Comment noted. Summarizing section 11, which is just over one-page long, was not considered necessary.

28. The discussion in section 4.7.4.6 has been expanded. Also, see response to League of Women Voters comment #20.

29. The Notice of Preparation was sent to over 1,000 parties. A list of recipients including addresses is available for review at the Port and Corps offices.

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30. These sites were not considered for the ". . . 1.3 million cy the Port intends to landfill at Galbraith . . ." because of the prohibitively high cost to dispose of material at the sites. See response to Sierra Club comments #1 and #5.

31. The text cited by this comment refers to public concerns identified in the Notice of Intent (NOI) and Notice of Preparation (NOP) processes regarding "the breadth of the alternatives evaluated in depth, and why certain alternatives were eliminated from further consideration in the environmental review process."

Public comments were received indicating that the SEIR/S should discuss a variety of alternative disposal sites, all of which are addressed in this SEIR/S. These include the San Pablo Bay Dredged Material Disposal Site (Sierra Club, San Francisco Bay Chapter); the Ocean 102 site (San Jose Flycasters); an alternative including a combination of upland and ocean sites (California Department of Fish and Game); transportation of sediments unsuitable for aquatic disposal by rail to a landfill in Utah (EPA Region IX and California Department of Fish and Game); Cargill and Skaggs islands (San Francisco Bay Conservation and Development Commission); and alternatives to confined aquatic disposal at the Bay Farm Borrow Area and the Leonard Ranch rehandling facility, including the Leonard Ranch, Montezuma Wetlands, and Redwood Landfill disposal sites (EPA Region IX).

Sections 2.5 and 2.6 of this SEIR/S discuss why specific alternatives were eliminated from further consideration in the environmental review process. The breadth of alternatives evaluated in depth in this SEIR/S includes 12 alternatives involving various combinations of eight disposal sites.

32. The requested text change has been made.

33. The requested text change has been made.

34. A brief discussion of the sediment sampling and testing methods is provided in response #6 to the Department of the Interior letter, dated May 5, 1994. For a more detailed description of sediment sampling and testing methods, see the response to Hearing comment #45 and the references in Appendix A of the FSEIR/S.

35. Exhaust emissions for the Port/Landfill option were quantified and documented in the new Table 4.1.4.7-1 and included in Appendix B.

GARY SCHNITZER, Executive Vice President, Schnitzer Steel Products, letter dated April 27, 1994.

1. This comment indicates support for the proposed project. Comment noted.

WAYNE K. HORIUCHI, Special Representative, Union Pacific Railroad Company, letter dated April 21, 1994.

1. This comment indicates support for the proposed project. Comment noted.

JAMES D. LEVINE, President, Levine-Fricke, letter dated May 2, 1994.

1. Comment noted.
2. The impact analysis in the DSEIR/S does cover applicant-proposed mitigation. More importantly, the DSEIR/S considers not only the goal of mitigation, but a critical assessment of the probability of its outcome and success. Where there are deficiencies or uncertainties in proposed mitigation, these are considered also in the assessment of overall impacts. Thus, there is no justification to revise the approach of the impacts analysis to consider a narrowly optimistic assessment of mitigated impacts which equates mitigation goals with inevitable results of mitigation. Similarly, "data" provided on the existing natural resources of the MWP site are "filtered" interpretively by both Levine-Fricke and by the DEIS lead agency, since the impact analysis depends essentially on interpretation of data. Substitution of Levine-Fricke's interpretation of "data," impacts, and mitigation for the interpretation of the lead agency would not comply with the lead agency's environmental review responsibilities.
3. The Draft EIR/S on the Montezuma Wetlands Project has not yet been completed. In the absence of that document, the Oakland Harbor FSEIR/S has, to the extent possible, focused the impact analysis on the Phase 1 area of the Montezuma Wetlands site, since that is where Oakland Harbor sediments would be placed. Also, the broader conclusions of the Montezuma Wetlands alternative have been narrowed where appropriate to be specific to the Oakland sediments. Generally, *potential* benefits of the Montezuma Wetland alternative are assessed; this is distinct from concluding that benefits *will* occur.
4. Table 7.2.1-1 of the FSEIR/S reflects the estimated costs associated with each dredged material disposal alternative. These estimated costs have been prepared based upon a set of assumptions, including Montezuma Wetlands site information provided by Levine-Fricke concerning such items as ratios of cover to non-cover material and tipping fees, to provide a planning level comparison of project alternative costs. For reasons stated in section 7 of the FSEIR/S, the Montezuma Wetlands alternative disposal site is not considered part of the recommended plan for the Oakland Harbor project.
5. The combined Sonoma Baylands-Montezuma-Port/Landfill alternative was not selected for consideration because, after maximizing disposal of dredged material at Sonoma Baylands, there would not be enough "cover" material for Montezuma to provide a one-to-one "cover" to "non-cover" ratio as specified by Levine-Fricke.
6. See response #3 above.
7. The claim of endorsement by the "regional community of environmental scientists and wetlands advocates" is unsubstantiated. The Montezuma Wetlands Project DEIR/S has not been circulated, and thus there is no regional community official reaction.

The "piecemeal approach" (i.e., focusing the impact assessment on the Phase 1 area of the Montezuma Wetlands site) is precisely what enables the Oakland Harbor SEIR/S to avoid the issue of endangered species impacts at Montezuma Wetlands. It is acknowledged that the Fish

and Wildlife Service and the Corps recognize the *potential* ecological benefits of Montezuma Wetlands for fish.

8. The claim that "[e]very potential impact of the MWP stems from activities to restore wetlands" is incorrect. The Corps recognizes that the basic purpose of the Montezuma Wetlands project is dredge disposal, with wetland restoration as part of the overall purpose. Dredge disposal has direct adverse impacts that may be mitigated by the subsequent marsh restoration. Again, proposed mitigation must be evaluated not on the basis of its goals, but in terms of adequacy, appropriateness, and likelihood of success. The Montezuma Wetlands technical reports and mitigation proposals have been reviewed and considered, but not adopted uncritically.

9. See response #3 above. The Oakland Harbor SEIR/S should evaluate only the direct, indirect, and cumulative impacts of discharging dredged materials at the Phase I site, and not the 1,800-acre site as a whole. Phase I is mostly jurisdictional wetland which is essentially seasonal and variable in ecological value: most of the quality of the grassland is low, but the extent is great, and there are some areas of greater wildlife habitat value.

10. See response #9 above. The comment is without merit and self-contradictory. It affirms that dredged materials would be deposited on 576 acres of jurisdictional (seasonal) wetlands, which would eliminate them immediately. Then the comment overstates the confidence of the claim of the future condition of the site: rather, when the restoration activities are implemented, Phase I *may* support *up to* about 600 acres of wetlands of higher value. It is also possible that some of these activities may fail (particularly putative "high marsh" intended for areas filled well above MHHW) and could result in poor quality wetland habitat or non-wetland conditions. It is therefore not certain that there would be no loss of jurisdictional wetlands in Phase I. Also, the statements are incorrect in narrowly identifying seasonal wetland values exclusively with seasonal ponds ("saline basins"). The comment is correct to identify the misapplication of the term "salt marsh."

11. The objection to the conclusion about plant uptake is in error. The original claim was about a *potential* impact which requires further examination because of the risks involved in long-term bioaccumulation of contaminants. There is no *direct evidence*, such as that provided by a pilot project, which can reject the claim of possible uptake of contaminants. Further, it is not established with reasonable certainty that the 3-foot cover layer of sediment would isolate plant roots from non-cover materials. The literature search provides none of the direct evidence that would come from a pilot project specific to local vegetation and marsh conditions, and is primarily useful for generating working hypotheses about post-project conditions.

12. The uncertainty of post-project plant community composition and abundance negates the comments on vernal pool and sensitive plant mitigation. It is not scientifically supportable to commit to a prediction that a particular rare plant species would or would not occur on the post-project site, given the extent of uncontrolled environmental variables involved. It is acknowledged that the restricted distribution of Mason's lilaeopsis and Delta Tule Pea plant populations of Phase I would probably preclude impacts.

13. See response #12 above.

14. The comment fails to distinguish long-term from short-term impacts. Dredged material disposal would indeed eliminate raptor foraging habitat. Wetland restoration, if successful, would probably mitigate this in the long term. Again, the premise of the comment is uncritically optimistic and ignores interim adverse conditions. The comment does not refute the observation of raptor foraging at the project site, so the comment conclusions do not follow.
15. Comment noted.
16. It is acknowledged that there are *potential* benefits, including threatened species. The FWS and NMFS staffs have neither endorsed nor opposed the project.
17. See response #10 above. Jurisdictional wetlands, vegetated to varying degrees, would be immediately eliminated by the deposition of dredged material in Phase I. There would be a loss of wetland vegetation within the impacted area until wetland vegetation is replaced or reestablished. The comment incorrectly cites the DSEIR/S description on page 3.4-44 as indicating there is virtually no wetland vegetation on the site. As the DSEIR/S discussion on page 3.4-44 indicates, the site supports a mixture of community or patch types, including plant assemblages dominated by low-growing, native and non-native species that nevertheless comprise wetland vegetation, and intervening bare areas. The mitigation measure identified may be implemented through lead agency review and approval of plans developed by the applicant. The adequacy of the applicant's proposed timetables and monitoring and performance criteria to eliminate the potential impact of temporal wetland loss has not yet been established. Hence, it is appropriate to include this potential impact and mitigation measure in the DSEIR/S.
18. Comment noted.
19. The recommendation regarding mitigation for errors in marsh elevation is unwarranted. The evaluation that the marsh design elevations should be modified, and that unintentional deviations from design may occur, should stand. The identified mitigation should remain.
20. It is agreed that filtered decant water would likely not be significantly contaminated, but this does not preclude the possibility of contaminant escape. Monitoring is necessary, and monitoring could be justified if escape of contaminants is possible.
21. Most of the comments on mosquito production are acknowledged. Even if the project did not conform with the restoration goals, it is unlikely that the project could cause a net increase in mosquito production, since most of the area would be below mean high water (MHW). Areas filled above MHW could become sites of mosquito production. The existing site, however, is already a substantial problem regarding mosquito production. However, pond salinity per se would not likely preclude vegetation growth in a brackish tidal marsh.

PAUL H. KING, Hydrogeologist, P&D Environmental, letter dated May 2, 1994.

1. See response to City of Oakland Planning and Building comment #4.

Responses to Comments on the Draft SEIR/S

2. The analysis has been revised to conclude that recreational impacts resulting from the temporary loss of Galbraith Golf Course are significant and unmitigable. The land use values in tables 6-1 and 6-2 have been revised accordingly.
3. The duration of the loss of the golfing facility is discussed in the revised section 5.3.6.2.
4. The comment is correct in that Table 7.2.1-1 does not present the total project cost for the Galbraith alternative. A footnote has been added to the table to account for the costs of the Galbraith proposal that are not considered in the Corps' estimates. The addition of these supplemental Galbraith costs does not affect the relative ranking of the feasible alternatives as explained in Chapter 7.
5. The text of section 4.7.4.6 has been modified to reflect the impacts to workers at the existing golf course. Although the impact to employees is not significant on the regional scale, the Port has proposed a mitigation measure.
6. This discussion has been added to section 2.9.2.16 addressing Executive Order 12898.
7. The "unique" nature of the recreational facility at Galbraith, as noted in this comment, has been incorporated into section 5.3.6.1.
8. See response to the City of San Leandro comment #4 regarding traffic impacts. See response to EPA comment #28 regarding the volume of imported topsoil.
9. See the response to City of San Leandro comment #6.
10. A low-permeability subsurface cutoff wall will be installed around the perimeter of the landfill underneath the drying facility. The cutoff wall will extend between the bay mud beneath the site and up into the above-surface dikes that define the drying ponds. The cutoff wall will significantly slow the off-site movement of landfill liquid. The low permeability of the cutoff wall will act to hold contaminants, such as the petroleum hydrocarbons on site. The cutoff wall will adequately attenuate the movement of landfill fluids containing petroleum hydrocarbons, thereby protecting groundwater off site. However, once the dredged material is delivered to the facility, the petroleum hydrocarbons may migrate to the surface of the drying ponds. The RWQCB is therefore requiring the Port to investigate ways to prevent the discharge of surface water containing petroleum hydrocarbons into the Bay. Among the measures being considered to prevent discharge of petroleum hydrocarbons are (a) remediating the petroleum hydrocarbons before placing dredged material in the facility, if possible, or (b) isolating the surface discharge in the area where petroleum hydrocarbons have been detected and treating the discharge. The design of the cutoff wall will conform to the standards set forth in Title 23 of the California Code of Regulations Chapter 15. These standards were created to prevent landfill leachate from causing groundwater to exceed water quality standards.

A plan showing the containment system's design is included in Figure 2.7.6-2 and is described conceptually in response to P&D Environmental comment #10. The Regional Water Quality Control Board (RWQCB) must review and authorize the design for the containment system as part of the Port's Report of Waste Discharge. The RWQCB will determine whether the design

of the cutoff system is adequate before they consider issuing Waste Discharge Requirements. The RWQCB will hold a public hearing on the permit action.

11. The eastern third of the site is not underlain by bay mud (Subsurface Consultants 1991), but is underlain by firm soils, primarily stiff to very stiff silty clays containing some layers of silty sand and gravel. Recent field investigations by both Subsurface Consultants and Harding Lawson Associates confirm these observations. Although permeable native materials are present underneath this portion of the landfill, it is unlikely that vertical migration of fluids from the debris material would occur. The debris material is separated from these permeable materials by 5 to 24 feet of impermeable silty clay, and the clay would retard vertical flow from the saturated debris unit.

Regarding the two well pairs that were referenced, one set of wells is on the southwestern border of the site and the other is on the south central border. In each pair, one well is completed in bay mud and the other in the underlying alluvium. See Figure N-4 (page N-74) for the monitoring well and boring locations.

12. See response to P&D Environmental comment #11.
13. See response to RWQCB comment #51. In response to the last two paragraphs of this comment, the text has been changed accordingly.
14. See response to RWQCB comment #51.
15. See response to RWQCB comments #51 and #59. Also see the revised levee cross section in Figure 2.7.6-2.
16. The statement is correct. The levee material will not be removed, but will be regraded on site. The text has been changed accordingly. See response to the City of Oakland, Office of Parks and Recreation comment #2 regarding topsoil.
17. BAAQMD guidelines and many other air pollution control districts do not require that the "Region of Influence" be identified in an EIR. A Region of Influence can only be defined by air pollutant dispersion modeling. The BAAQMD guidelines provide for five different approaches for assessing the significance of impacts, which include other measures besides modeling. The air quality impact analysis in the SEIR/S (section 4.1) used an approach (comparing estimated emission rates to existing emission rates) that did not require modeling. Unmitigated significant impacts from dust were not identified from any of the sites analyzed in section 4.1.

A detailed human health risk assessment (HHRA) was also performed for the Leonard Ranch Rehandling site, the Galbraith site, and Ninth Avenue Terminal. The HHRA is summarized in section 4.9 of the SEIR/S. The HHRA included dispersion modeling of fugitive dust, estimation of dust concentrations at sensitive receptors, and comparison of estimated dust concentrations to various significance criteria. The HHRA did not identify any significant impacts from dust at the nearest sensitive receptors.

18. See response to City of Oakland Office of Parks and Recreation comment #1.

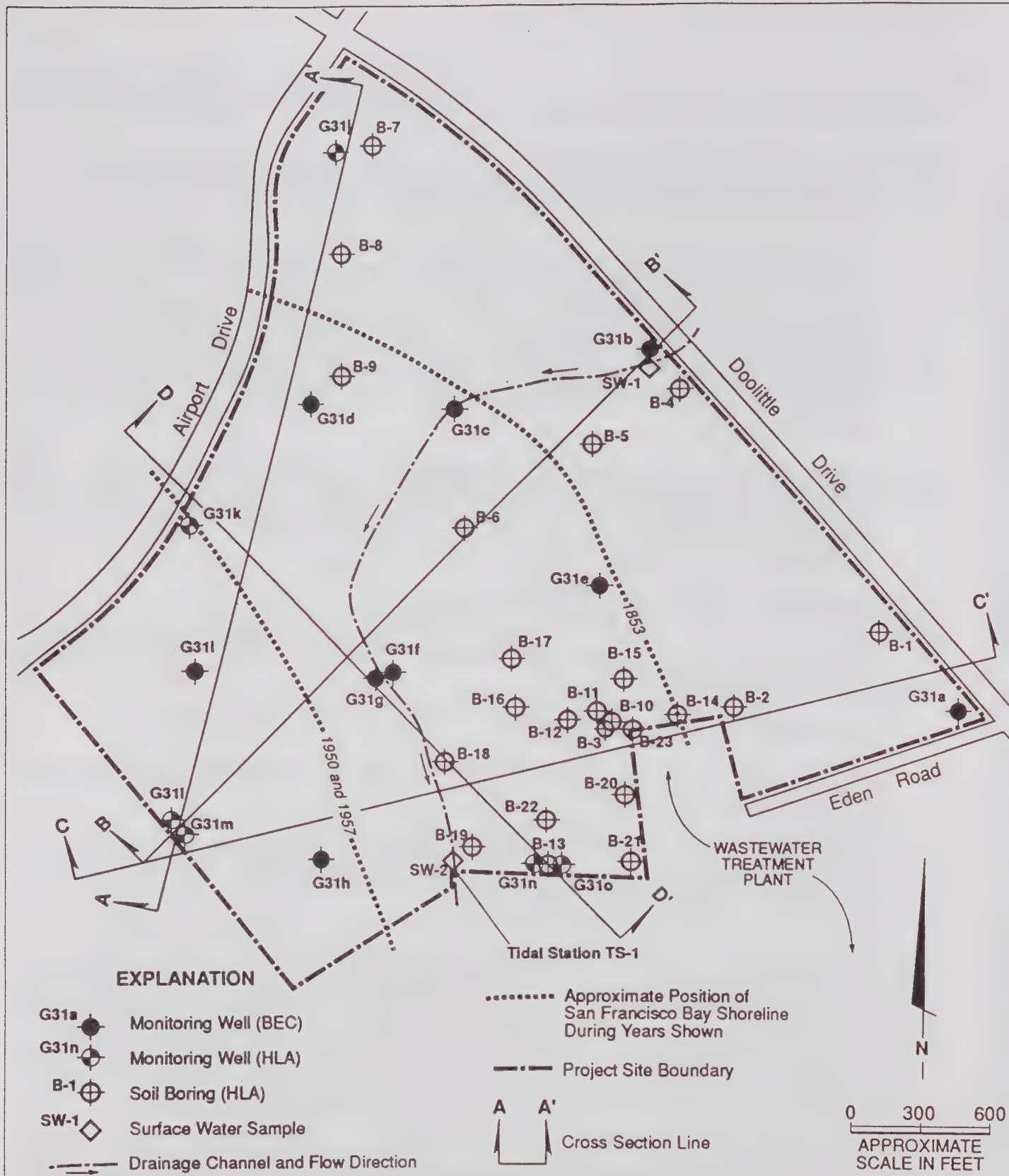


Figure N-4

**MONITORING WELL AND SOIL BORING LOCATIONS
GALBRAITH GOLF COURSE, OAKLAND, CALIFORNIA**

19. Investigating previous dredging operations involving similar material is the best evidence for evaluating the potential for significant odor impact. Those investigations indicate that a significant odor impact has not resulted from disposal at Berth 30, Berth 40, Port Sonoma-Marin, or San Leandro drying operations. See revisions to text in sections 4.1.2.2 and 4.1.4.6.

20. The environmental setting discussion and impacts assessment for the Leonard Ranch site are consistent. Both sections stress that archaeological sites have been recorded in the vicinity of this site, which indicates that there is a potential for prehistoric resources to be located onsite. If unknown cultural resources were encountered on the Leonard Ranch site during construction, it is likely that they would be adversely impacted prior to their assessment by a qualified archaeologist.

Professional archaeologists agree that the presence of prehistoric archaeological sites adjacent to an area which has not been systematically surveyed is the strongest indication of "sensitivity," or the potential for additional sites to be located in that area. This conclusion, based on extensive studies of contemporary hunting and gathering populations and prehistoric site distribution, assumes that prehistoric populations used food and tool resources throughout regions called catchment areas. This foraging behavior leaves evidence of hunting and gathering activities distributed in predictable patterns over the landscape. Archaeological sites adjacent to Leonard Ranch suggest that this potential disposal site was potentially part of a wider region exploited by prehistoric populations.

These accepted theories of archaeological site distribution used to assess the cultural resource sensitivity of the Leonard Ranch alternative are considered "substantial evidence" under CEQA Section 15384, in that they provide for "reasonable inferences [such] that a fair argument can be made to support a conclusion, even though other conclusions might also be reached." This potential sensitivity is not "speculative." The project alternatives summary for cultural resources has been revised to reflect the substantial evidence for potential adverse impact at the Leonard Ranch alternative. No changes in Tables 6-1 and 6-2 are required.

21. See response to Golden Gate Audubon comment #24.

Response to Comments from Golf Organizations

REOLA LOUISE FREEMAN, Lew Galbraith Junior Golf Program, letter dated April 14, 1994.

1. See response to City of Oakland Planning and Building comment #4.

2. See response to City of Oakland Planning and Building comment #4.

BARBARA OLIVER, President, Lew F. Galbraith Women's Golf Club, letter dated April 1994.

1. See response to City of Oakland Planning and Building comment #4.

Responses to Comments on the Draft SEIR/S

1 **BARBARA OLIVER, President, Lew F. Galbraith Women's Golf Club, letter dated April 14, 1994.**

- 2
3 1. See response to City of Oakland Planning and Building comment #4.
4

5 **H. TATS NAGASE, Nagase Golf Group, letter dated May 1994.**

- 6
7 1. See response to City of Oakland Planning and Building comment #4.
8

9 **SAL GOMEZ, President, Lew F. Galbraith Men's Golf Club, letter dated May 1994.**

- 10
11 1. See response to City of Oakland Planning and Building comment #4.
12

13 **AL KIDDER, Secretary for the Seniors in Retirement (SIRS), letter dated May 1994.**

- 14
15 1. See response to City of Oakland Planning and Building comment #4.
16

17 **SHIG NAKAYAMA, President, The Swinging Samurai's, letter dated May 1994.**

- 18
19 1. See response to City of Oakland Planning and Building comment #4.
20

21 **JOHN HOUGHTON, President, East Bay Seniors, Lew Galbraith Golf Course, letter dated May**
22 **1994.**

- 23
24 1. See response to City of Oakland Planning and Building comment #4.
25

26 **BRIAN KEEFER, Desmond Muirhead, Inc., letter dated April 18, 1994.**

- 27
28 1. The proposed plan for the Galbraith facility (outlined in a Memorandum of Understanding with
29 the City of Oakland) includes reconstruction of an improved "first class" golf course at the
30 Galbraith site at the end of the drying period. Alternative sites for the dredged material that is
31 "unsuitable for unconfined or aquatic disposal" were evaluated and determined not to be feasible.
32
33 2. See response to City of Oakland Planning and Building comment #4. The Port considered using
34 only a portion of the golf course for dredged material disposal (SEIR/S section 2.6.3.3).
35 However, because of the volume of material involved, the Port determined that the additional
36 acreage was required.
37
38 3. See response #1 above.
39

40 **JOHN NAKAMURA, President, Northern California Golf Association, letter dated November 15,**
41 **1993.**

- 42
43 1. See response to Brian Keefer's comment #1 above.
44
45

AART C. de VOS, Ransom, McKay Golf, Inc., for Lew F. Galbraith Golf Course, letter dated April 26, 1994.

1. The statement in the comment has not been verified.
2. The City of Oakland states that Mr. de Vos' statement that the concessionaire does not owe the City any amount in unpaid contract obligations is incorrect. The City of Oakland states that there is an Interim Concession Agreement between City of Oakland and Ransom/McKay Golf, Inc. dated June 30, 1992 ("1992 Interim Agreement"). The City of Oakland states that there have been no subsequent agreements between the City and Ransom/McKay Golf Inc., and that the 1992 Interim Agreement supersedes all other agreements entered into between the City and Ransom/McKay Golf, Inc. The 1992 Interim Agreement is the agreement under which Ransom/McKay is currently holding over as the operator of Galbraith Golf Course. The City of Oakland states that paragraph 6 of the 1992 Interim Agreement clearly requires Ransom/McKay Golf Inc. to repay \$332,000 in moneys owed to the City by no later than September 30, 1992. The City of Oakland states that as of May 12, 1994, Ransom/McKay Golf Inc. had not repaid the moneys owed under paragraph 6 and also owes the City additional sums of money for concession privileges pursuant to paragraph 5 of the 1992 Interim Agreement.
3. The impacts of importing both topsoil and levee material are addressed in the SEIR/S in section 4.8.4.6 and have been determined not to be significant.

Through the Memorandum of Understanding (MOU) with the City of Oakland, the Port has agreed to reconstruct a public golf course at the Galbraith site at its expense. The MOU states that the Port will "provide for the City to lease on a long-term basis a new and improved golf course under substantially the same terms and conditions of the existing lease The Port will provide for construction of a first class golf course including its design and financing No consideration shall be given to any debt service or other periodic payments required to pay the principal and any interest on any debt incurred by the Port to finance the construction of the new golf course in determining net revenues from the new golf course." The text has also been changed to indicate that some of the recreational impacts cannot be mitigated.

Table 7.2.1-1 has been modified with a footnote to reflect the total cost of the proposed project including site preparation and golf course reconstruction that are not already included in the Corps' cost estimates.

Responses to Comments from Individuals

SHIRLEY JEWELL, letter dated April 16, 1994.

1. The site at the end of Pardee Drive between the Airport channel and the San Leandro Flood Control channel is the subject of litigation brought against the Corps of Engineers and the Port of Oakland by the Sierra Club, Inc., Save San Francisco Bay Association, and the Golden Gate Audubon Society regarding the allegation of the placement of unauthorized fill in wetlands. All parties are currently attempting to negotiate a settlement to that suit. If successful, the settlement will require the Port to restore seasonal and tidal wetlands to most of the site. The remainder

Responses to Comments on the Draft SEIR/S

of the site would receive soils excavated from the restoration site. Therefore, no land would be available to accept dredged material from the deepening project.

The second site suggested, near the intersection of Harbor Bay Parkway and Doolittle Drive, is also not available for this use. A portion of the site is an existing wetland that federal and state law prohibits filling unless no non-wetland sites are available. A portion of the area indicated is located at the end of one of the active runways at the North Field at the Oakland Airport. Federal regulations (FAA) do not allow above-grade structures (including levees to contain dredged material) to be built in this area. Therefore, this area is not available to receive dredged material.

ROBERT B. KRAUSE, letter dated May 2, 1994.

1. See response to P&D Environmental comment #19.
2. See response to City of Oakland, Office of Parks and Recreation comment #1.
3. See response to the City of San Leandro comment #4.
4. See response to RWQCB comment #51.
5. See response to P&D Environmental comment #7.

MICHAEL SMAHLIK, letter dated May 5, 1994.

1. See response to P&D Environmental comment #19.
2. See response to City of Oakland, Office of Parks and Recreation comment #1.
3. See response to the City of San Leandro comment #4.
4. See response to RWQCB comment #51.
5. See response to P&D Environmental comment #7.

REOLA L. FREEMAN, Junior Golf Program at the Lew Galbraith Golf Course, statement dated April 14, 1994.

1. See response to Hearing comment #5.
2. The Port considered using only a portion of the golf course for dredged material disposal (SEIR/S section 2.6.3.3). However, because of the volume of material involved, the Port determined that the additional acreage was required.
3. The youth program will continue at the Galbraith driving range, with access to another full course on Saturday afternoons. See response to City of Oakland Planning and Building comment #4.

- 1 4. See response to City of Oakland Planning and Building comment #4.
2

3 **JIMMIE and EVELYN WESLEY, letter dated March 12, 1994.**
4

- 5 1. The youth program will continue at the Galbraith driving range, with access to another full course
6 on Saturday afternoons. See response to City of Oakland Planning and Building comment #4.
7

8 **GERALD A. BAXTER, letter dated March 1, 1994.**
9

- 10 1. The youth program will continue at the Galbraith driving range, with access to another full course
11 on Saturday afternoons. See response to City of Oakland Planning and Building comment #4.
12

13 **JOYCE ESTELL, letter undated.**
14

- 15 1. The youth program will continue at the Galbraith driving range, with access to another full course
16 on Saturday afternoons. See response to City of Oakland Planning and Building comment #4.
17

18 **PHYLLIS WATSON, letter dated March 26, 1994.**
19

- 20 1. The youth program will continue at the Galbraith driving range, with access to another full course
21 on Saturday afternoons. See response to City of Oakland Planning and Building comment #4.
22

23 **JACQUELINE SINGLETON, letter dated March 4, 1994.**
24

- 25 1. The youth program will continue at the Galbraith driving range, with access to another full course
26 on Saturday afternoons. See response to City of Oakland Planning and Building comment #4.
27

28 **BARBARA J. EPPERSON, letter dated March 12, 1994.**
29

- 30 1. The youth program will continue at the Galbraith driving range, with access to another full course
31 on Saturday afternoons. See response to City of Oakland Planning and Building comment #4.
32

33 **MR. & MRS. ADO BOLTON, letter dated March 4, 1994.**
34

- 35 1. The youth program will continue at the Galbraith driving range, with access to another full course
36 on Saturday afternoons. See response to City of Oakland Planning and Building comment #4.
37

38 **MAXIMUM FRANKLIN and MOTHER, letter undated.**
39

- 40 1. The youth program will continue at the Galbraith driving range, with access to another full course
41 on Saturday afternoons. See response to City of Oakland Planning and Building comment #4.
42

43 **TONIA JAMISON, letter dated March 1, 1994.**
44

- 45 1. The youth program will continue at the Galbraith driving range, with access to another full course
46 on Saturday afternoons. See response to City of Oakland Planning and Building comment #4.
47

Responses to Comments on the Draft SEIR/S

CAROLYN CHAPPELL, letter undated.

1. The youth program will continue at the Galbraith driving range, with access to another full course on Saturday afternoons. See response to City of Oakland Planning and Building comment #4.

PAULINE THOMAS, letter undated.

1. The youth program will continue at the Galbraith driving range, with access to another full course on Saturday afternoons. See response to City of Oakland Planning and Building comment #4.

MRS. MAYOLA L. LEWIS, letter undated.

1. The youth program will continue at the Galbraith driving range, with access to another full course on Saturday afternoons. See response to City of Oakland Planning and Building comment #4. See also response to Hearing comment #6.
2. Numerous alternative disposal sites were considered in the SEIR/S (see sections 2.6 and 2.7). The basis for selection of the environmentally preferred alternative, which includes Galbraith Golf Course, is explained in section 7.1.

JESSE LEWIS, III, letter dated March 5, 1994.

1. The youth program will continue at the Galbraith driving range, with access to another full course on Saturday afternoons. See response to City of Oakland Planning and Building comment #4. See also response to Hearing comment #6.

ELLEN J. OLIVER, letter dated March 1, 1993.

1. The youth program will continue at the Galbraith driving range, with access to another full course on Saturday afternoons. See response to City of Oakland Planning and Building comment #4.

DICK ABBOTT, letter dated February 26, 1994.

1. The youth program will continue at the Galbraith driving range, with access to another full course on Saturday afternoons. See response to City of Oakland Planning and Building comment #4.

RUSSEL BAZE, letter dated March 16, 1994 [copies of this form letter were also submitted by 263 other individuals whose names and addresses are printed in Appendix M following the letter].

1. The inability to fully mitigate the loss of golfing opportunities for all those that would be affected by the project (all users who are not covered by the mitigation plan discussed in section 5.3.6.3) is discussed in the SEIR/S and duly noted as a significant unavoidable impact.

One-hundred (100) petitions stating "We, the undersigned oppose the closing of Lew F. Galbraith Golf Course, Oakland, California by the Port of Oakland for the proposed disposal of dredged material," dated August 10, 1993, were signed by approximately 2,000 people.

1. Comment noted.

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